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ORIGINAL LECTURES.

CLINICAL LECTURE

ON LOCOMOTOR ATAXIA; SPASMODIC STRICTURE OF THE ŒSOPHAGUS; CHRONIC CATARRHAL NEPHRITIS; AND CHRONIC PERITONITIS.

Delivered at the Hospital of the University of Pennsylvania

BY WILLIAM PEPPER, M.D., LL.D.,

Provost of, and Professor of the Theory and Practice of Medicine and of Clinical Medicine in, the University of Pennsylvania.

Reported by WILLIAM H. MORRISON, M.D.

LOCOMOTOR ATAXIA.

GENTLEMEN,—I do not propose to enter into a minute discussion of this case. I show him to you as a good illustration of ordinary, typical, progressive locomotor ataxia. There are unquestionably extensive lesions in the posterior columns of the cord. He has almost complete anæsthesia of the soles of the feet, so that he does not feel the ground as he stands upon it. There is also great impairment of sensation in the legs. This interruption in the conduction of sensations to the brain through the posterior columns of the cord, owing to the sclerosis, prevents him from having a knowledge of his position and of the contraction of the various muscles, so that he does not know what movement to make to balance himself. This renders it impossible for him to stand in the dark or with his eyes shut, even with the aid of a cane. On watching his feet, you observe that he presents the typical ataxic gait.

The reflexes are almost completely abolished. There is some trouble with the rectum and bladder, but not very marked as yet. The stage of fulgurant pains is passed.

There is, he says, some numbness in the hands in the distribution of the ulnar nerve. The muscles of the face and eyes are not involved.

Here we have a typical case of progressive locomotor ataxia or posterior spinal sclerosis, with its classical symptoms and stages.

Before coming here he was under treatment with large doses of iodide of potassium, having taken as much as one hundred and twenty grains three times a day. Under these large doses the nutrition was somewhat depressed. I have stopped this, and for the time being placed him on the use of nitrate of silver; but it is doubtful how far we can relieve the case where the lesions are as extensive as here. The man has improved under rest, diet, and the abandonment of the colossal doses of the iodide. The rest has been almost complete: he spends twenty-two out of the twenty-four hours in bed. This has been followed by improvement in his appearance and by some gain in his strength and the ability to walk. Rest certainly delays the progress of the disease and economizes the spinal forces, so that the vegetative functions are performed more perfectly than when the patient is allowed to move about. Nitrate of silver is useful, especially in the earlier stages of locomotor ataxia. I shall push this as far as it is safe; but I do not expect any considerable radical improvement.

The prognosis of such a case is exceedingly unfavorable as regards cure, for many of the nerve-fibres are destroyed by the pressure of the contracting fibro-cellular tissue in the cord. The prognosis is favorable as regards the prolongation of life and the relief of symptoms, if the patient be in good circumstances and careful of himself. These cases sometimes run an exceedingly prolonged course. As usual, we investigated the cause of this condition, and it appears to be distinctly traceable to severe constitutional specific taint.

SPASMODIC STRICTURE OF THE ŒSOPHAGUS.

This lady has been in attendance upon the dispensary for some time. She is a widow, aged 48 years; she passed the menopause seven years ago. She has had considerable trouble in family and financial matters, which has extended over a number of years. She has complained of more or less difficulty in swallowing. This dates back a period of fifteen years. This difficulty in swallowing is accompanied by pain behind the upper part of the sternum, increased by efforts at deglutition and followed by return of the food. This pain, with the inability to swallow and the regurgitation, is sometimes noticed at every meal; then she will be comparatively free from the attacks for a few days. It sometimes happens that she will be able to

nearly finish the meal before any of this trouble arises, while at other times the very first mouthful will be followed by the symptoms mentioned. Slightly tart and acid articles excite the attacks more frequently than do bland and unirritating articles. Water often brings on a paroxysm, and meat very frequently does. Of all things she has tried, warm milk can be taken most constantly and with the greatest ease. In addition to these symptoms of œsophageal stricture, there have been evidences of gastric disorder of a catarrhal dyspeptic type. There has been frequent vomiting of mucus early in the morning, and occasionally she is awakened at night with the vomiting of sour mucus and partly-digested food. She has a poor appetite, digestion is slow, and she has some feeling of weight and fulness in the epigastrium. Her general health has been somewhat depressed, and she has lost some flesh. The amount of weight lost, however, is very small considering the duration of the case and the severity of the symptoms.

What is the nature of this stricture? We divide strictures of the œsophagus into organic and spasmodic. We distinguish between these two, in the first place, by the history of the case. Organic strictures sometimes come from traumatic causes, such as the swallowing of caustics, acids, and the like. It is sometimes the result of syphilis, being preceded by symptoms of œsophageal ulcer and slowly developing contraction from the formation of a cicatrix. It also results from the presence of a neoplasm, pressing upon or developing within and obstructing the tube. We have in organic stricture slowly developing difficulty of deglutition, at first for large pieces of solids, then for smaller pieces, then for thick liquids, and finally for thin liquids. This difficulty of deglutition is slowly progressive.

Spasmodic stricture, on the other hand, is characterized by the fact that it is associated with conditions which lead to neuroses, and is accompanied with some evidences of nervous disorder. It is often found in hysterical persons. The present case is proof that hysteria is not necessary for its development, but that it may result from nervous exhaustion and prolonged nervous strain. In this patient the difficulty of swallowing appeared after a long period of successive nervous shocks, protracted anxiety, and depressing emotions, breaking down the nervous system. Spasmodic stricture is not slowly progressive, but paroxysmal. In this case the obstruction is almost complete at times, and then for days there is very little difficulty. At times it appears on attempting to swallow the first mouthful, while again she will finish half the meal before the difficulty appears. It is therefore fluctuating and not constant.

The effect upon the general health is very different. In the organic stricture, if there be a constitutional syphilitic condition, and still more if there be a cancerous development going on, the general health suffers, and there is rapidly progressive emaciation, debility, and cachexia. In spasmodic stricture the patient preserves weight and general health marvellously well. Although the distress is great, still they manage to get enough food to supply their needs, and, as there is no organic disease sapping their vitality, the nutrition is well preserved. Although this patient has had these symptoms for a number of years, she has lost only five pounds from her best weight. This is a very significant fact.

The most conclusive means of determining between organic and spasmodic strictures is by the passage of a bougie. In organic obstruction the bougie will determine the point at which the stricture begins, its tightness, and the length of œsophagus involved. In spasmodic stricture of the œsophagus the button may at first be grasped tightly, but a little gentle pressure overcomes the constriction, and a good-sized ball can be passed through the whole length of the œsophagus.

There are one or two cautions to be given in probing the œsophagus. No matter whether you feel certain that the stricture is a spasmodic one or not, the bougie should never be introduced until aneurism of the aorta has been carefully excluded; for if there be an aneurism the pressure of the button may be sufficient to cause its rupture. In this case there is no such condition. Great care must be exercised in the use of sounds with movable balls. It might happen that in the flurry of passing the probe the operator might unscrew the ball from the handle. While I presume that the ball would be passed from the alimentary canal, at the same

time the accident would be alarming both to the patient and to the operator. It would be advisable to have each ball supplied with a handle securely fastened to it. Morell Mackenzie recommends balls with an oval section, for, as you know, the œsophagus is a flattened tube whose transverse diameter is greater than its antero-posterior diameter. Such buttons can often be passed more easily than a round button in case of stricture.

I shall now pass the probe. At the upper part of the œsophagus it is grasped with some firmness, but a little gentle pressure causes it to yield, and the bougie now passes without difficulty.

The diagnosis of such a case as this is easy. The symptoms are characteristic. It is essential to recognize the cause, for its removal is important in the treatment. In many of these cases the cause is found in a condition of nervous disturbance, hysteria, or emotional shock or long strain. In addition, there is often gastric irritation. In other cases there is ovarian or uterine irritation. In this case we have a condition of dyspeptic catarrhal inflammation, which I have no doubt has played a part in keeping up this spasmodic condition of the œsophagus, and must be treated before we can hope to cure the stricture completely.

The prognosis is, of course, favorable as regards life and our ability to cure it, provided we can remove the cause.

In this case, so far as the emotional influences are concerned, we cannot remove them, but the gastric trouble may be relieved. The diet should consist of warm milk, light cereals, and finely-minced meat. The meals should be taken in smaller quantity and at somewhat shorter intervals than usual, and we should endeavor to make digestion as complete and as free from irritation as possible. For the relief of the catarrhal irritation, I shall use moderately full doses of bismuth and pepsin, giving her, after each of five light meals, five grains of pepsin with eight grains of subnitrate of bismuth. With this I shall apply counter-irritation over the epigastrium with blistering collodion, making a blister about two inches in diameter, and repeating this every couple of weeks. As far as the œsophagus is concerned, great benefit will be derived from the systematic passage of the sound, and we shall have her come to the dispensary twice a week to have the sound passed as you saw me do to-day.

CHRONIC CATARRHAL NEPHRITIS.

This young lady is suffering with Bright's disease, but we have been unable to determine how or when it began. She is 23 years of age, and has been doing ordinary housework. She never had scarlet fever, so far as we are able to ascertain. She had a severe attack of diphtheria when five years of age. This was not followed by dropsy, and, as you know, diphtheria is much less likely than scarlet fever to be followed by Bright's disease. For the past two years she has suffered with attacks of headache, coming on like attacks of megrim, unilateral and trigeminal, sometimes going on to produce sickness of the stomach. At first these attacks came every month, being worse at the menstrual periods. In the intervals, attacks of headache would occur every three or four days. Lately she has had pain over the eyes and on top of the head every morning on rising. There was no apparent cause for these headaches. There was no strain of the eyes, and her work did not oblige her to use the eyes. Her work was not of an exhausting character. In searching for a cause of these headaches, I found that for some time she has been obliged to get up once or twice during the night to urinate. Further, we learned that for five weeks past the eyesight has become so dim that she is unable to read or sew.

These symptoms at once called attention to the necessity of examining the urine. On boiling, it was found to contain one-fourth its bulk of albumen. Its specific gravity was 1010, its color pale, and on standing it deposited hyaline and granular cysts. For the past year she has had marked dyspepsia. This has been shown by a heavily-coated tongue, bad taste in the mouth, want of appetite, and constipation of the bowels. Examination of the eye-ground with the ophthalmoscope shows advanced albuminuric retinitis, with patches of exudation in various stages of absorption.

Here, then, is a case of chronic catarrhal nephritis, which may be traceable back to the attack of diphtheria, or which may have come on as a subacute idiopathic disease. It is impossible to decide this point, and it is equally impossible to say how long this disease has existed. This

case illustrates the necessity of examining all cases carefully. The symptoms which led to the diagnosis in this case were the recurring headaches and the dimness of vision.

Finding this condition of albuminuric retinitis with the evidences of chronic catarrhal nephritis, we conclude that the headaches are connected with the organic change in the kidney, and are in all probability what may be called uræmic in type. These symptoms are associated with the retention of effete matters in the system which should be eliminated by the kidneys, and the presence of which in the blood leads to irritation and depression of the nervous system, with this tendency to headache. This is not an uncommon expression of the early stage of uræmia. Giddiness, impairment of memory, and drowsiness are other symptoms which often follow. Such manifestations should put you on your guard, for, if overlooked, they may suddenly be followed by uræmia in an intense form, with grave nervous symptoms, eclampsia, deepening stupor, coma, and even fatal results.

You must also remember that in Bright's disease, although the lesions are chiefly located in the kidneys, they are none the less attended with disorders of the general nutrition, and in all probability there are slight changes in the vessel-walls of other parts of the body. When these changes affect the vessels of the lungs, pulmonary symptoms will be present; when the minute vessels of the brain are involved, there will be cerebral symptoms. Sometimes the walls of the heart are attacked, leading to the development of secondary lesions in that organ. I do not regard the symptoms as entirely dependent upon the retention of effete matters in the blood, for frequently there is associated with this actual tissue-change, affecting particularly the minute vessels. Where we see, as here, positive retinitis with thickening of the perivascular sheaths and with exudation, we cannot reasonably doubt that somewhat similar changes may have occurred in the minute vessels of the brain and its membranes. The symptoms called uræmic are not always entirely dependent upon imperfect elimination of effete matters, but may in part be due to actual local change in the nerve-centres. In a case of this kind I should suspect that the secondary lesions were of considerable importance.

I am anxious to bring this patient under the influence of jaborandi. As the girl is run down, I shall give her iron, probably in the form of Basham's mixture, in doses adapted to the condition of the stomach. While this acts favorably upon the general nutrition, and by its diuretic qualities acts somewhat upon the kidneys, its eliminative effects are not sufficiently powerful where we know that uræmia is threatened. I shall therefore associate with this treatment the use of jaborandi, which is of great value for this latter purpose. I have found jaborandi particularly useful in favoring the absorption and removal of such lesions as we can watch in the eye in albuminuric retinitis. I have more than once seen grave uræmia, with considerable dropsy and dimness of vision amounting to almost total blindness, with the ophthalmoscopic evidences of extensive retinal changes, pass away under the persistent use of jaborandi. Not only have the symptoms subsided and vision returned, but the ophthalmoscope has shown a steady and progressive decrease in the retinal lesions. This patient has been under observation but a short time, and we cannot determine how long the disease has been present, and we do not know what reaction we shall find. We cannot promise such brilliant results in this case. One week ago we ordered her to take the fluid extract of jaborandi in fifteen-drop doses. She says that she was unable to retain this. I shall now instruct her to take five drops after each meal, and gradually increase it until she reaches fifteen drops three times a day. If she still vomits the drug, we shall give it by the rectum. Pilocarpine would answer very nicely here if it were not for its expense. The diet will be carefully regulated, and she will live almost entirely on skim-milk.

CHRONIC PERITONITIS.

J. M., aged 20, a laborer, has not been working very hard, and has not been much exposed to the weather. His habits are regular, and he does not use alcohol. The family history is good. He came to this country five months ago, and was then apparently well. He was always a delicate child, however, and when seven years old injured himself about the chest by a fall. This was followed by an abscess which is believed to have been in the chest-wall. One month after coming to this country

he began to have a little pain and soreness about the pit of the stomach. This did not seem to be influenced by eating. Six weeks ago, without apparent cause, there was a great increase of the pain and soreness, with general aching through the body, and with this there was moderate fever. This attack seemed to last one week. The pain and soreness have since then been more marked, and lately he has noticed that the abdomen is uniformly enlarged.

This patient presents the appearance of a stout lad, but his face looks bloated; the color is pale and waxy; there is, however, no pitting on pressure; there is no history of inflammatory rheumatism; the action of the heart is rapid and a little labored; there is over the præcordia a depressed cicatrix which marks the situation of the old abscess; the heart is pushed upward a little by the distention of the bowel, but its size is not materially altered; there is no valvular murmur; the sounds are heavy and slightly prolonged. This is particularly true of the second aortic sound, which is distinctly intensified, but without murmur. There is, then, probably thickening of the left ventricle, with increased arterial tension, suggesting some obstruction in the line of the arterial circulation,—such a condition, therefore, as we find in chronic contracted kidney. This is the first time that I have seen this patient, but the condition of the heart would lead us to examine the kidneys. I now learn that there is a trace of albumen, but there has not yet been time to examine for tube-casts, which will be done.

Turning to the abdomen, we find that it appears to be uniformly swollen. There is resonance all over the abdomen, and I can detect no fluctuation at any point. I can find no tumor, but the belly is not soft and yielding as it should be. There is a sense of uniform resistance which cannot be entirely overcome by pressure. In some positions it seems a little more resistant than in others. There is apparently no enlargement of the liver, and there is no marked enlargement of the spleen. A little tenderness is present.

It is altogether probable that this condition is dependent upon subacute peritonitis. There probably has been at first a little local peritonitis in the region of the liver, accounting for the soreness and tenderness first felt, and then a slight general peritonitis supervened, explaining the attack of fever with pain and soreness. The abdomen gives the sensation which is found when coils of intestine are agglutinated together, preventing them from being freely pressed from one point to another.

There is no history of phthisis in the family, and he has never had any cough or other symptom referable to the lungs.

Subacute peritonitis may follow repeated slight attacks. It may be associated with tuberculous formation. The condition of this patient is not satisfactory. The action of his heart may be simply the result of excitement, and I may be mistaken in thinking that there is anything suggested by it. The trace of albumen in the urine might, in the same way, be accounted for by a little congestion of the kidneys. We occasionally find subacute peritonitis just as we have subacute pleurisy in the course of chronic contracted kidney.

As I have said, there is no history of tuberculosis in the family, and there is therefore reason to hope that this is not tuberculous in character; but of all forms of peritonitis, tuberculous peritonitis is the one most likely to be associated with irritation of the mucous membrane of the bowel. We find here a little tendency to looseness of the bowels, although no actual diarrhœa. In the other forms of peritonitis the irritation of the serous membrane is apt to be attended with constipation from inaction of the muscular layer of the bowel. The case, however, is an obscure one, and we have not sufficient data for a diagnosis at the present time.

ORIGINAL COMMUNICATIONS.

THE VALUE OF BINIODIDE OF MERCURY AS AN ANTISEPTIC IN OBSTETRICS.—SECOND PAPER.

Read before the Obstetrical Society of Philadelphia, April 1, 1886,

BY EUGENE P. BERNARDY, M.D.

AT a meeting held June 4, 1885, I had the pleasure of reading before this Society a paper on the "Value of Biniodide of Mercury as an Antiseptic in Obstetrics." It was with hesitancy that I brought forward the claims of a new

agent whose properties were at that time comparatively unknown. My only knowledge of its effects was that which I had derived from reading the experiments of Dr. Miquel, of France, and from my experience in three cases. To-night I again bring it to your notice, not as an unknown and untried antiseptic, but as one which has proved itself far superior to any of this class of preparations which I have thus far used in my obstetric practice.

Since writing my first paper, I have learned that the biniodide of mercury has been used for the past year in preference to all other antiseptics at the Lariboisière Maternité of Paris, and the reports of the results obtained have likewise been highly favorable.

In a letter written by Dr. Thomas Linn from Paris, France, to the *Philadelphia Medical Times* (March 6, 1886), referring to the subject of antisepsis, the following passage occurs:

"Professor Panas has again something to say about antisepsis in eye-surgery, principally in the treatment of cataract. The principles that guide him are, first, to make use of an antiseptic that is *sure* and *not irritating* in its action. . . . . Of all the antiseptics which he has used during the last two years, Dr. Panas has now definitely adopted a solution of the biniodide of mercury in 20 to 1000 ($\frac{1}{20}$ to 1000 ?).* Even in 40 to 1000 ($\frac{1}{40}$ to 1000 ?), this salt possesses a very strong anti-fermentative power, so that at double the strength nothing should resist it. . . . . As to the other antiseptics used: boric acid is not irritating, but its antiseptic power is doubtful; the bichloride of mercury is more irritating than the biniodide, and its antiseptic power is not half so great."

These remarks fully substantiate the opinion expressed in my former paper, that I considered the biniodide of mercury far superior to the bichloride of mercury as an antiseptic. Of course, the cases of Dr. Panas belong to eye-surgery; but still the experiments made in both classes of cases led to the same conclusions.

I have here the history of eight other cases in which I found it necessary to use the biniodide. I have perhaps given a fuller detail of circumstances than may appear necessary. If I have so erred, I have done it for the purpose of fully and clearly showing under what conditions the antiseptic was used.

It will be observed how readily offensive odors disappeared after only a few injections of the biniodide. In some of the cases the odor around the patient was perfectly horrible.

Case I.—On September 9, 1885, I was requested to attend Mrs. F., residing at Fifty-fifth and Vine Streets, in her fifth confinement. Her previous labors had taken place in Belgium, and had always been terminated by the forceps; only two children being born alive. The first and third lyings-in were complicated by attacks of puerperal fever.

I arrived about 2 P.M. Found the patient had been in labor since the previous evening (8 P.M.). On examination, found the os completely dilated, head presenting; while to the left I felt what seemed to be a prolapsed cord. The head seemed jammed between the promontory of the sacrum and the pubes. I ruptured the bag of waters, so I could make a more decisive examination. Down came a loop of non-pulsating cord, which proved to be irreducible on account of the position of the head. The presentation was now made out to be a partial brow; an antero-posterior contraction existed; the promontory of the sacrum caught the side of the head and pinned it in position. I attempted to push the head up, but soon found it could not be done. I then attempted to produce flexion, and failed. Wallace's forceps met with similar results: on account of the unnatural position of the head, the forceps constantly slipped. By this time I was completely exhausted. I gave one-half grain of morphiæ sulph., which would insure the patient needed rest, as her pains had all along been active.

On my return at 5 P.M., found the condition of things the same. Dr. A. E. Roussel, who came with me, etherized the patient. I again attempted to change the position of the head, but failed. Pajot's long forceps were applied, but on the slightest traction they would slip. Tarnier's forceps seemed to grasp the head in a firmer manner, but they finally gave way. I had now worked continuously for two hours. Seeing there was no other resource, I perforated the head, and within twenty minutes the child was extracted, which weighed, without the brains, fifteen and one-half pounds.

The patient was living on the second floor, in a room partitioned off the main room of a factory. The room was well located and freely supplied with fresh air. Her husband was the nurse. The next day found the pulse 100, temperature 101°; extreme tenderness over the abdomen, especially over the region of the uterus. I washed out the uterus with the $\frac{1}{15000}$ solution of the biniodide of mercury, and left orders to have it done four times a day.

* Evidently an error in proportion, as in the formula given it is 1-20 gramme to the litre, or 1 to 20,000.

The second visit found the patient free from pain; pulse 80, temperature 98⅕°. Convalescence went straight on as in a normal labor. On the fourth day there was considerable pain over the uterus. Towards evening, while washing out the vagina, a clot of blood about the size of a pigeon's egg was expelled, perfectly free from odor. The patient was up on the eighth day.

Case II.—Was called (October 5, 1885) to attend Mrs. Mc., age 30, third confinement. After an easy labor she was delivered of twins. The placenta came away naturally, and everything went well up to the evening of the sixth day, when she became suddenly feverish and thirsty. The vaginal discharges became highly offensive,—so much so that the windows had to be constantly kept open. I immediately ordered injections (hot) of the $\frac{1}{4000}$ solution of the biniodide of mercury, asking the patient to note particularly when the odor disappeared. The first injection was followed by no effect; but on the second injection being made, the odor disappeared, and did not return during convalescence. Discharged on the tenth day, well.

Case III.—On the morning of October 7, 1885, I was called to attend Mrs. B., age 28, sixth confinement. About a month previous she had called at my office, and I had given my opinion that the child she was carrying was undoubtedly dead, and that she was likely to fall in labor at any time. On my arrival at the house, found, after examination, the os perfectly dilated and the bag of waters protruding between the vulvæ. Ruptured the bag of waters, and of all stenches I never smelled the like. The windows had to be thrown open. On pushing my examination, found a small hydrocephalic child descending. Labor was lingering, but finally the child (in a putrid condition) was expelled naturally. The placenta came away without any trouble.

I ordered the patient to be washed out with $\frac{1}{4000}$ solution of the biniodide of mercury four times a day. The first injection I administered myself. The second and third injections were followed by a slight stinging sensation, which I believe came from using water which was too hot; but, to make certain, I reduced the biniodide to the $\frac{1}{8000}$. Within two days the discharges became perfectly odorless. Each injection was followed by a feeling of ease and comfort. Discharged well on the ninth day.

Case IV.—On October 23, 1885, I was requested to attend Mrs. R. in her fourth confinement. Her third lying-in had been followed by a severe attack of puerperal fever. Upon examination, found the os rigid, dilated about an inch; waters ruptured; vertex presentation, right occipito-posterior position. Labor was lingering, os remaining somewhat rigid. About 9 P.M., no headway having been made, and the patient showing symptoms of exhaustion, she was fully etherized. I then applied Wallace's forceps and delivered her of a living child; no laceration. The next day she complained of pain over the region of the uterus. Ordered one-eighth grain morphiæ sulph. in tablespoonful of camphor-water every two hours. On my next visit found the tenderness had increased and the discharges from the vagina were becoming offensive. Ordered hot injections of the $\frac{1}{4000}$ solution biniodide of mercury. The following day the discharges were free from odor, the tenderness of the uterus abated. Discharged well on the fourteenth day.

Case V.—On the morning of November 3, 1885, I was asked to see Mrs. C.,—first confinement. In this patient a year previously I had dilated a constricted os. Pregnancy was ushered in with marked kidney-trouble: the urine yielded over thirty per cent. of albumen. The patient was enormously swollen from dropsical effusion. The case from the start was not a promising one. On arriving at the house, found the patient very nervous; on examination, found the os slightly rigid, but dilating, the waters ruptured. Labor dragged on slowly all day, with very little advance. Towards twelve, midnight, she suddenly went into a spasm; I immediately etherized her; by the time she was completely etherized Dr. Curtin, whom I had sent for, arrived. On examination the os was found dilated, slightly rigid. The ether was pushed, with the effect of softening the os. I then applied Simpson's forceps, but they would not hold; Wallace's long forceps were applied, and in a short time the patient was delivered of a fine bouncing boy; no laceration.

The next visit found the patient doing well; pulse about 80, temperature normal. On my second visit the temperature was 102°, pulse 120–130, great fever, excessive tenderness of the uterus, the discharges very offensive. This sudden change was caused by the stupidity and incompetency of the nurse. The nurse being discharged, the mother of the patient undertook to nurse her. I immediately ordered hot injections of $\frac{1}{4000}$ solution of biniodide of mercury. The second injection the odor disappeared, but in this case did not remain away: I believe it was on account of not having a competent person to use the injections. Even as imperfectly as my orders were carried out, the biniodide held the odor under control, as the discharges were never as offensive as before its use. The patient was discharged well on the fifteenth day.

Case VI.—On November 11, 1885, I attended Mrs. L. in her fifth confinement; her last two confinements had been followed by puerperal fever. She had been delivered by an excel-

lent and careful obstetrician. She dreaded the present confinement. On arrival, found the child was born; in a short time the placenta came away. The next visit found the patient doing well, with the exception of some tenderness over the uterus. Being compelled to leave the city, I handed the case over to Dr. A. E. Roussel. On his first visit the patient was feverish, pulse 100, temperature 101°, discharges extremely offensive, excessive tenderness over the uterus. Internally, two grains of quinia and one-eighth grain morph. sulph. were ordered every three hours, and four times a day hot injections of the $\frac{1}{4000}$ solution of the biniodide of mercury. On his next visit found the patient better and the discharges free from odor. The patient was discharged on the ninth day well, feeling satisfied that the *red pills*, as she called the pellets of the biniodide, had saved her from another attack of puerperal fever.

Case VII.—Mrs. B., on December 28, 1885, miscarried about the fifth month. On my arrival at the bedside, found the fœtus had been expelled early during the day; the hemorrhage had been excessive; on examination, found shreds of placenta in the vagina, could detect a larger portion in the uterus; the patient declined any interference, stating that it would come away itself. The patient lived in a small ill-ventilated house, up a court, having for nurse the neighboring women. Gave freely of ergot, but without effect; within twenty-four hours the odor from the vaginal discharges was highly offensive; ordered the $\frac{1}{4000}$ solution of the biniodide of mercury to be thrown up the vagina four times a day; a few injections readily dissipated the odor. On the fifth day the remaining portion of the placenta came away, free from odor. The patient was discharged well on the tenth day.

Case VIII.—On March 20, 1886, I was requested to attend Mrs. ——, wife of a physician. On my arrival at the house, found that labor-pains had set in about 4 A.M. Saturday morning; examination showed the os soft and dilating, waters broken, vertex presentation; labor continued throughout the day, and terminated naturally at 10.15 P.M.; no rupture of the perineum, but the mucous membrane of the vagina, just behind the posterior fourchette, yielded to the extent of half an inch; there was a tendency to post-partum hemorrhage, which was readily checked by compression and the administration of ergot. Next day, pulse 92, skin rather hot, natural flow from the vagina. On my next visit, Monday, March 22, pulse 130, temperature 103½°, pain over the left side of the uterus; the uterus appeared flabby, not having well contracted. Same day at five o'clock, pulse 130, temperature 104°, discharges from the vagina highly offensive. Ordered the vagina to be washed out with a solution of carbolic acid (twenty per cent.), ten grains of sulphate of quinine morning and night, and twenty drops of tincture of digitalis every three hours. Midnight, same day, pulse irritable, quick, and compressible: pulse 128, temperature 103°, the discharges from the vagina still offensive. Next morning, temperature and pulse the same; no change. Ordered the $\frac{1}{4000}$ solution of the biniodide of mercury to be thrown up the vagina, and if possible into the uterus; the injections were administered by the husband, and were thoroughly applied. On the 24th the condition of the patient seemed improved: temperature 102°, pulse 115–120.

On the next morning the husband called at my house and informed me that his wife was in every way worse; the pulse was so irregular that he could not count it; temperature 104°; patient vomited several times; tendency to diarrhœa. I asked Dr. Goodell to meet me in consultation. On arriving at the bedside of the patient, found her in a remarkably good condition; pulse 100, temperature 102°; examination showed slight laceration of the mucous membrane in the vagina, uterus was contracted; treatment to be continued, with this addition if the case did not get along well: to use ten-grain vaginal suppositories of iodoform in conjunction with the biniodide injections. These suppositories were not used, as the case from this day did well, with this exception, that on the 27th March, or the seventh day of confinement, she was allowed to get up and use the night-vase. This was followed by a severe secondary hemorrhage, which was checked by hot-water injection and ergot. From the time the biniodide was used the vaginal discharges were free from any offensive odor, and it seemed to have a decided influence on the temperature. The patient is still under treatment.

We have here eight cases added to the three of my first paper, making in all eleven cases. This certainly gives us sufficient data to draw conclusions.

The deductions drawn from my early cases are fully sustained by my subsequent experience, and in my mind fully establish the value of the biniodide of mercury as an antiseptic in obstetric practice.

In my first series of experiments, to make my solution of the biniodide I took one and three-quarter grains of the salt, placed it in a mortar, and gradually broke up its particles, after which I slowly added one pint of boiling distilled water. This gave me a $\frac{1}{4000}$ solution. This took a long time, and often alcohol had to be added to dissolve the mercury.

Mr. J. F. Hayes, of St. George Pharmacy, conducted a series of experiments

for the purpose of placing the biniodide in the hands of the physician in a convenient and readily-soluble form. To obtain this end, pellets were made of three different strengths. In making them sufficient iodide of potassium was added for the purpose, though not enough to cause any chemical change with the biniodide. The following is the method pursued in making the pellets. Both salts should be perfectly dry. The potassium iodide is first placed in a mortar which has been slightly warmed (just enough to take the chill out of it), and thoroughly powdered; the biniodide is then added and well mixed, but not rubbed hard, or the powder will be apt to cake. Care must be taken not to compress the pellets too hard: they keep just as well and are more easily dissolved when they are compressed just hard enough to make a firm pill. The following is the formula for the pellets:

$\frac{1}{4000}$ = mercuric iodide $3\frac{21}{40}$ grains, potassium iodide 2 grains. Mix as above, and compress in pellet.

$\frac{1}{8000}$ = mercuric iodide $1\frac{29}{40}$ grains, potassium iodide $\frac{8}{4}$ grain. Mix as above, and compress in pellet.

$\frac{1}{15000}$ = mercuric iodide $1\frac{6}{2500}$ grains, potassium iodide $\frac{1}{2}$ grain. Mix as above, and compress in pellet.

In this form the preparation can easily be carried in the satchel. When required for use, one pellet is to be added to a quart of hot water (110°). It dissolves easily, and does not stain the clothing or bedding.

The strength which I generally use is the $\frac{1}{4000}$. Should it appear too strong, the pellet can be cut in half, or twice as much water used, thus giving a $\frac{1}{8000}$ strength.

221 South Seventeenth Street, Philadelphia.

INEBRIETY CONSIDERED AS A DISEASE.

BY EDWARD C. MANN, M.D.,

Superintendent Sunnyside Home for Nervous Invalids, Brooklyn, New York; Member Medical Society of the County of New York, New York Medico-Legal Society, etc.

IN the neurotic circle of society there is a greatly-augmented susceptibility to the action of stimulants and narcotics, and a greatly-increased consumption of chloral and morphine, and of the great nerve-sedative, tobacco. The group of male and female inebriates who exhibit the disease of dipsomania is almost entirely confined to the neurotic circle, and this latter circle is increasing out of proportion to the increase of population. This is due to the influence of the conditions of modern life upon the nervous system, and through the nervous system upon the nutrition of the tissues. The outer relations of the modern American have become more numerous, complex, and heterogeneous than formerly, and his environment more varied and intricate. We therefore find the greatest amount of alcohol-, chloral-, and opium-inebriety in towns and cities, where nervousness and nervous diseases most abound, and not in the rural districts. Its growth is encouraged by the excitement of city life and by the absence of the tranquillizing influences of nature to be met with in the country.

The remote cause is often educational pressure unwisely applied to weakly children, which induces brain-fatigue. A proof of this is found in the fact that the preponderance of alcohol-, chloral-, and opium-inebriety is to be found in the refined and cultivated classes. There are vast reserves of hidden and unauthenticated cases of this kind which reveal great, unfathomed depths of nervous and mental unhealthiness in our community. The great increase in suicides also points in this direction.

The whole order of nervous diseases not necessarily accompanied by mental disorder, but in many instances tending towards it, are widely prevalent among our population. Such diseases are epilepsy, paralysis, locomotor ataxia, spinal irritation, neuralgia, hysteria, chorea, etc. A bodily derangement is responsible for every mental derangement, and a mental element enters into every bodily disease, and the increasing nervousness of this country is most clearly evinced to observant physicians. Mental anxiety and distress and sudden fear and shock are important exciting causes of many of the neuroses; also, the pressure of modern life, keen competition, and the struggle for existence.

In place of a well-balanced growth of body and mind, we too often meet with headaches, imbecilities, nervousness, or insanity, some of which date back to the nursery. It is wise for parents to bear in

mind that a good moral training of their children protects them in great measure against the moral contagia which float about in such varied abundance in the social atmosphere of cities and towns, and which are so inimical to mental health. The subjective properties of an individual's mind depend upon the objective properties of the matter constituting the mind's food. As there is, even in the simplest protoplasmic cell, the action of individual parts for the benefit of the whole, so in society there is the action of individuals which is either beneficent or the reverse to the whole corporate body of society.

To return to the subject of this paper more directly: In the disease of inebriety we have deranged nutrition, which precedes the blood-changes, and the disease arises in abnormal primary and secondary assimilation. Defective assimilation in this disease gives rise to defective secretion. There is an abnormal state of the blood; the blood-supply is not sufficient; there is an abnormal condition of the ganglionic or great sympathetic nervous system, and the parts which are to be nourished are not normal. We have a poor state of the blood and disturbed conditions of life which are often the cause of the disease of inebriety.

We have the *subjective* symptoms, which relate to the sensations or feelings of the patient as expressed by himself in this disease, and we have the *objective* symptoms, which the physician observes for himself unassisted by the patient. In this disease we should examine with care the digestive system, the circulatory system, the respiratory system, the tegumentary system, and the secretory system. The symptoms of inebriety are those signs of disease which are apparent to either the patient or physician on superficial examination, while the physical signs are those which we observe when we make an anatomical examination of the patient's body (that is suffering from inebriety). The different parts of the blood may be affected in this disease. We may have anæmia. The blood in the veins is pink instead of blue, and we hear venous murmurs, when the red blood-corpuscles run below eighty in a thousand. There should be normally one hundred and twenty-seven in every thousand. We can see in these the beating or throb of the vessels at the root of the neck. Anæmic or hydræmic blood is due, therefore, to a relative increase of the white corpuscles of the blood. We see this often in inebriety, and in those who are addicted to the chloral and opium habits. The connection between the nervous system and a proper supply of the red corpuscles or arterial blood is very intimate. Thus we see women and men addicted to alcohol, chloral, or opium (or the bromides, as some women are) very nervous and irritable. This is explained by the connection between the blood-vessels and the nerve-centres, and it consists in an altered condition of the nerve-matter from defective nutrition. The blood normally contains two qualities,—viz., nutrition and stimulation. The stimulation is due to the oxidizing process, and impoverished blood is defective both in nutritive and in stimulating qualities. These patients complain of much headache from anæmia. There is a semi-paralysis of the vaso-motor part of the ganglionic system, which is so intimately connected with the capillary system in the disease of inebriety. We have also toxæmia, or blood-poisoning, produced by the introduction into the blood of poisonous elements from without,—alcohol, chloral, or opium. We have also morbid elements and alterations occurring in the blood; and, finally, the non-excretion of the poisonous elements which should be eliminated. The blood is poisoned, and we get a structural, vital, and general change in the blood in inebriety, from whatever agent—alcohol, chloral, opium, or the bromides—the patient indulges in habitually. Molecular death of the blood commences, the contractility of the heart's fibres begins to be lost, and death will finally occur unless the art of the physician interferes.

In the disease of inebriety we have a morbid action proceeding from the direct action of the cause. There are various circumstances which modify this, as other diseases. It varies very much as regards severity, length, etc., in different individuals of different ages, sexes, and conditions of health at the time of the invasion of the disease. In young men and women we find the arterial circulation very much livelier than at any other age, and inebriety affects the brain through its circulation, sometimes with frightful rapidity producing an intractable type of insanity; while in the old we find apoplexies, ather-

omatous degeneration, and softening. In this disease we have the entrance of the morbific agents and change in the blood. At a certain point the nervous system becomes involved in the morbid action. There is a degeneration of the muscular force, and the various organs of the body may become complicated. In this disease we get after a time an asthenic state of the system, due to the excessive venosity of the blood, a contaminated state of it, with a local hyperæmia of the centric nervous system, a congestion, which is one of the most common causes of cerebral disease. Finally, there is induced from atony of the vessels a state of passive hyperæmia of the brain and nerve-centres, associated, I think, with disease of the coats of the vessels themselves. There is a want of tonicity in all parts of the circulatory system. As the ganglionic nervous system has a direct influence over the capillary system, the morbid impression produced on the ganglionic system by alcohol, chloral, or opium will excite local passive hyperæmia. The over-excitement of the vessels themselves, moreover, causes them to fall into an atonic tortuous condition, causing a state of passive hyperæmia. The effects of these local congestions in the brain and various organs of the body in inebriety have reference—1, to the impaired vitality of the part or organ; and, 2, to the effusion from overloaded vessels.

We have congestion, stagnation, and determination of blood, with lowered vitality and a tendency towards destruction of tissue. The local excitation passes beyond physiological limits and produces enervation, the result of irritation. The chemico-vital relation between the blood and the nerves being disturbed, we get inflammation of a low grade in the liver, kidney, etc. The degenerative processes in inebriety are slow, progressive, and chronic, with a tendency towards decay and death, and there is a tendency to fatty degeneration at times, or a tendency to the replacement of the natural or healthy tissue by oil-globules. In all the forms of degeneration in inebriety there is substitution of abnormal tissue for healthy tissue. The muscular structures are most frequently involved, the heart, liver, kidneys, and also the brain. Atheroma of cerebral arteries is a frequent form of degeneration in inebriates. The deposit takes place between the lining coats of the artery. This degeneration may be calcareous, and it takes place in vessels which have lost their nutrition, or which have been subject to abnormal changes. We may also find amyloid or waxy or albuminoid degeneration in various organs in this disease. This degeneration is supposed to be owing to fibrin which has lost its alkalinity.

Inebriety is a disease probably of certain parts of the brain, resulting from *some morbid irritation of the cortical sensory centres*, or from special molecular changes in these centres, perverting brain-function, a condition markedly hereditary, and evinced outwardly by great nervous irritability or restlessness, unnatural sensations, an uncontrollable desire for alcoholic stimulus, and a disposition to frequent fits of intoxication. There is a departure from a healthy structure of the nervous apparatus, as in mental diseases generally. The pathological evidence in favor of these facts was at first slender, has been yearly increasing, and is to-day conclusive and unanswerable. The inebriate is a subject of disease in which normal function is acting under abnormal conditions, and we should recognize this fact both as to medical and moral treatment. Dipsomania is inconsistent with a healthy discharge of the functions of the brain and other portions of the nervous system. It is a symptom of a morbid condition of some portion of the nervous system, and experience shows us that this disease is the most frequent where diseases of the nervous system are most fatal. I have no data to indicate what proportion of persons laboring under diseases of the nervous system exhibit dipsomania; nor is it necessary here to inquire what the proportion may be. It is sufficient for our purpose that there is no reason to believe that the proportion in one locality will differ materially from the proportion in another locality: hence, if in any locality we find the number of deaths from diseases of the nervous system persistently large year after year, we may with fairness conclude that dipsomania and the disease of inebriety will be exhibited with proportionate frequency in that locality. Statistics indicate that nervous diseases are exceptionally more frequent in densely-populated districts, and I think they may also be accepted as indicating that dipsomania, which is one of the manifestations of

nervous disease, exists to a greater extent in urban than in rural districts, and the results of careful inquiry both at home and abroad have shown the author that the urban population yield cases of this disease in much larger proportion than the rural population.

Inebriety and dipsomania are governed by the same laws which govern mental pathology generally, and in our work on the disease of inebriety our aim has been to make our investigation as exhaustive as possible, that the results should be conclusive and scientific when presented to the profession and to the public. To this end the author has studied this subject from the stand-point of physiology and pathology, and not as either a moralist or a reformer, and his conclusion is that inebriety is a disease, a true neurosis, and that a departure from a healthy structure of the nervous apparatus exists as in mental disorders, and that in fact it is this abnormal condition of the centric nervous system demanding stimulants that is essentially the disease.

It is not generally known that Esquirol distinctly recognized this disease, both in its continued and its periodic form, under the name of dipsomania.* This distinguished authority on mental diseases says that sometimes the abuse of intoxicating drinks and drunkenness are the first symptoms, or rather the most prominent symptoms, of the first stages of madness; that "the stomach, being in that peculiar condition which produces an extremely painful moral and physical depression, craves strong drink;" that "this craving is imperious and irresistible;" that "it continues as long as the paroxysm, after which the patient becomes sober and assumes all the habits of a temperate life." This eminent physician also says that these persons "obey an impulse which they have not the power of resisting," and that "they are true monomaniacs;" and that a careful clinical physician will observe in them "all the characteristic features of partial madness."

Another distinguished physician in the field of mental medicine, Marc, says that dipsomania sometimes occurs in women at the climacteric period as a result of the important physiological changes which at that period take place in the female constitution. He says that he has met with many examples of it in women who had previously been habitually temperate, and who had adorned their social sphere.

The legal consequences of this disease are of no little interest to the medico-legal student. The author claims that dipsomania being an accidental, involuntary consequence of a diseased state of brain and mind, "it cannot impart the character of criminality to any action to which it may give rise." The patients suffering from this disease are clearly, we think, not morally responsible.

We think that in this paper we have not indulged in any theoretical speculations on the psychological effects of inebriety and dipsomania, but we have tried to attain to correct ideas concerning the diseased manifestations of inebriety.

204 Lefferts Place, Brooklyn, New York.

* Note in Hoffbauer, § 195; and Maladies mentales, ii. 80.

DRAINAGE-TUBE IN THE CHEST FOR TWENTY-ONE MONTHS.

Read before the Medical and Surgical Society of Baltimore

BY OSCAR J. COSKERY, M.D.,

Professor of Surgery, College of Physicians and Surgeons, Baltimore.

GEORGE C., aged 26, single, presented himself at St. Joseph's Hospital in July, 1885. He stated that he had a rubber tube in the right side of his chest which had been there since December, 1883, and that he wanted it removed; he was not prepared to come into hospital then, however, but would come later. He was of spare build, sallow, freckled-faced, with demi-blond hair and a light moustache; height, five feet eleven and a half inches; weight, one hundred and thirty-three pounds. He had weighed one hundred and fifty-nine pounds.

Admitted into hospital on September 21, 1885, with following history. In May, 1883, had pleurisy; on July 3, 1883, an incision was made in the right axillary line, between the eighth and ninth ribs, and a rubber drainage-tube introduced. This "fell out" on the next day, and a "silver" tube was put in. This also came away, and the wound closed rapidly. At the first insertion of the tube, on July 3, 1883, "many" ounces of pus, he says, escaped. After extrusion of silver tube nothing further was done in an operative way until December 7, 1883, when, under

chloroform, a rubber tube was introduced at the site of the first operation, and one end brought out in the right nipple-line. Since then a constant discharge of pus has occurred at each end of the tube. One year ago he had general anasarca for about four weeks. A month ago he noticed, for a few days, when he got up in the morning, that his face was "swollen."

Condition on admission: patient very anæmic; two openings found in right side of chest, through each of which a portion of the drainage-tube was found projecting; granulations at each opening had rather firmly grasped the tube.

Physical signs: on right side the respiratory sounds over upper half in front and upper two-thirds at back, moderately free; over lower half in front and lower third at back, just recognizable; on left side of chest, respiration puerile everywhere, with prolonged expiratory murmur over upper half, back and front.

On percussion: right side from clavicle to one inch above nipple, clear; from there to nipple (in nipple-line), *dulled;* from nipple to lower border of costal cartilages, dulness complete; line of dulness, seven inches in right nipple-line; in right axillary line, seven inches; in right scapular line, seven and a half inches. No enlargement of liver could be made out.

On ocular inspection a great difference of the two sides of the chest could be noted; the right subclavicular fossa was much increased, while the left was bulged out; there was flattening of the whole right anterior chest-wall, and projection of the left; the intercostal spaces were very apparent, also, on the right side. Respirations 32 to the minute.

Measurements of chest in repose: right side, on nipple-line, fifteen and three-fourths inches; left side, on nipple-line, seventeen inches; at ensiform cartilage, right side, fifteen and one-fourth inches; at ensiform cartilage, left side, seventeen and one-fourth inches.

On September 27, 1885, after some little difficulty, but without enlarging the openings, the tube was withdrawn through the wound in the nipple-line; a very slight amount of granulation-hemorrhage followed.

Upon examining the urine next morning, it was found heavily loaded with albumen; pus has run freely from each of the openings where the drainage-tube was; he has never had a convulsion; sometimes has headache, and has several times had, as to-day (the day after the tube was removed), a "fainting-fit."

The patient was put upon iron and cod-liver oil. His appetite continued poor, and, as diarrhœa made its appearance, the iron was stopped. The albumen in the urine, however, greatly decreased in quantity.

On October 12, 1885, he stated that the discharge had ceased from each opening (it had been to the estimated extent of about three-quarters of a pint daily since the removal of the tube), and that now his appetite had improved. Two days after this he complained that the wounds were again discharging freely, but that although he still felt a desire for food his mouth was so sore he could not take anything into it. A very extensive aphthous ulceration was found, greatest upon the right side, and involving both lingual and buccal mucous membranes. Diarrhœa, which had also improved for a time, returned, and the patient began to go down-hill. Without showing improvement at any time, the patient became dissatisfied, and was removed by his friends on October 21, 1885.

I learned that he died of exhaustive suppuration on November 23, 1885, the discharge continuing from both openings in about the same quantity to the end.

The points of interest in this case seem to be the length of time the tube was continuously worn, and the amount of albumen in the urine. It was at first thought that the latter might be due to organic changes in the kidney as a consequence of the continued suppuration; but the great decrease in the quantity of the albumen excreted under treatment, while the discharge of pus still continued, with a very slight interval, rather seemed to negative the idea.

ATTACKS OF DYSPNŒA RESEMBLING ASTHMA DUE TO PRESSURE BY A FATTY TUMOR, AND CURED BY OPERATION.

BY B. C. KEISTER, M.D.,
South Boston, Virginia.

DURING September, 1884, I was summoned to attend a lady in the country for a supposed case of "spasmodic asthma." The husband came in haste for his family physician, and, finding him ab-

sent, came to my office in a very excited state of mind, and told me that in the absence of his physician he wanted me to see his wife as soon as possible, stating that she was having one of her old attacks of asthma, and that he had fears of her death. I, of course, responded to the summons as promptly as possible. On entering the house and approaching the bedside, my attention was at once arrested by the peculiar breathing of the patient. It was of that peculiar hissing sound characteristic of membranous croup. I then made a brief inquiry into the history of the case, and was informed by the mother of the patient that these attacks were of very frequent occurrence, and that she had been suffering for about five years with "shortness of breath," as she termed it. She also stated that her attacks were becoming more frequent and her breathing more embarrassed, more especially at night. The husband added that he had scarcely any sleep at night, on account of having to attend to his wife. He also added that if she would remain in just one certain position she could sleep without any trouble. I then asked whether she had been taking any kind of medicine, and the mother showed me two vials containing two different medicines,—one of which contained tincture of lobelia and the other Fowler's solution of arsenic. The former was directed to be taken when the attacks came on, and the latter before each meal.

After hearing the history of the case, as well as the peculiar breathing of the patient, I felt satisfied in my own mind that the breathing was not of an asthmatic character, but that, on the contrary, it was suggestive of some obstruction along the trachea. With these considerations on the present aspect of things, I at once desired the removal of all the clothing from about the patient's neck, in order that I might be able to examine and ascertain the cause of her hard breathing. While the mother was thus carrying out my directions to make the neck bare for an examination, the patient turned her head over to one side, as if by accident, and at once stopped her loud breathing and remarked that she felt somewhat better.

This at once clinched my diagnosis; but I proceeded to examine the neck, and, to the surprise of all in the room, I found a fatty tumor situated at the margin of the clavicle and under the sterno-cleido-mastoid muscle. Although buried very deep, and situated under the margin of this muscle, I could feel it very distinctly and move it about with a very small amount of pressure with my fingers. I then turned the patient's head, by way of experiment, and found, to my full satisfaction, that the tumor was the whole cause of the supposed asthmatic attacks and loud breathing.

Satisfied with my diagnosis, I of course advised an operation for the removal of the growth. After much talk and persuasion, I finally got her consent to operate.

Upon my next visit, accompanied by my friend Dr. H. C. Beckett, of Scottsburg, Virginia, I enucleated, with its capsule or sac, the tumor. It was about the size of an ordinary turkey's-egg. The patient stood the operation well, and she has now entirely recovered her health and is quite free from her supposed asthma.

She has given birth to one child since the operation, and she remarked to me, when I last saw her, that she suffered less in her last pregnancy than in any one of the previous four. She also remarked that she was then enjoying better health than she had for more than ten years. The tumor had developed slowly, as lipomas usually do. It is quite probable that the asthmatic attacks were produced by irritation of some branch of the pneumogastric nerve by the gradually-increasing mass.

I made a brief synopsis of this case and reported it to the *Virginia Medical Monthly* last August. But since that time increasing interest in the case has prompted me to rewrite it, as an illustration of the necessity of a correct diagnosis and its relations to rational treatment.

NOTES OF HOSPITAL PRACTICE.

UNIVERSITY HOSPITAL.

SERVICE OF D. HAYES AGNEW, M.D., LL.D.,

Professor of Surgery in the University of Pennsylvania, etc.

(Reported by CHARLES BAUM, M.D.)

INCURVATED TOE-NAIL.

GENTLEMEN,—Among your cases of minor surgery, incurvated or "ingrown" toe-nail, as it is commonly called, will frequently occur. The term "ingrown," however, is not a perfectly proper one to express the condition, as the nail

retains its width, but by pressing upon the soft tissues provokes inflammation, swelling, and, finally, ulceration, so that the flesh rises up around the nail. Frequently the inflammation extends to the point of ulceration, and fungous granulations also often spring up, the pus from which is unhealthy and offensive. Pain and soreness now become so great as to prevent the sufferer from wearing a shoe, and, if a laboring-man, he may be obliged to quit his work.

A small number of such cases are observed among children, but the majority occur during adult life, and of them ninety-nine per cent. are caused by improperly-fitting shoes, which do not allow space for the toes. Some cases arise from closely rounding the edges in trimming the toe-nail. It should be cut off transversely, when trimming is required. Again, other cases are due to want of cleanliness, thus permitting an accumulation of epidermic scales to collect under the edge of the nail, there to excite inflammation by pressure.

The purple color of this man's toe is due to passive venous congestion, because the veins are not freely emptied. An offensive and unhealthy discharge comes from these granulations.

In such cases too frequently the nail is sacrificed. Scarcely any nail need be lost if patience be exercised, and if the soft tissues are pressed away from the nail while its side is elevated. This can be accomplished by using a blunt chisel-shaped instrument, with the aid of which we can carefully insert some absorbent cotton between the edge of the nail and the soft tissues. At the first dressing it may be impossible to insinuate the cotton along the entire side of the nail, but by patience and repeated packings a cure will often result from this simple treatment alone.

Should there be fungous granulations, the solid stick of nitrate of silver can be applied with advantage.

In most of the cases of incurvated toe-nail I prefer to replace the cotton by a piece of cork, which does not act unpleasantly upon the skin. The cork is cut so that a sharp hook-like edge may be pressed into the groove between the flesh and the side of the nail, while its body fits over the side of the toe, being kept in position by a strip of adhesive plaster surrounding both the toe and the cork.

When the nail is greatly deformed, and prevents a shoe from being worn with comfort, *evulsion* should be performed. In dispensary practice a nail is frequently removed when it could be saved, provided the patient would attend to the necessary dressings.

Evulsion of a nail is one of the most painful operations in surgery: therefore you should always administer an anæsthetic, preferably ether. Should the nail cling with unusual tenacity to the matrix, divide it in the middle by means of scissors and separately remove each piece.

By means of this curette I will separate this nail from its matrix, and then seize the inverted portion with dressing-forceps and wrench the entire nail from its bed. A piece of lint moistened with carbolized oil will now be applied, and on the second day a flaxseed-meal poultice, which will loosen the firmly-adherent dressing; after which carbolized oil will be applied each day.

When the new nail grows in, it will tend to assume the same deformity as the old. Should all efforts fail to correct the incurvation, it will be best to remove the entire nail and destroy the matrix by means of caustic potash. After such a procedure, dense fibrous tissue takes the place of the nail and protects the soft parts. I have never witnessed any evil result from this radical operation.

ATHEROMA AND ŒDEMA.

All physicians recognize the fact that certain diseases are prone to develop at different periods of life, and in this man, 65 years of age, we would naturally expect to find some marks of declining vigor.

For several years he has suffered in the winter-time from cold extremities. Several months ago he began to have cramps in his legs, especially the calf of the right side, and upon this leg he noticed a slight lividness of the skin, accompanied by slight puffiness of the foot and ankle.

These conditions gradually became intensified, until at present you see his leg is swollen as high as the knee. When I touch the limb, the tissues are found to be indurated and somewhat œdematous. The skin presents a dusky-red, mottled appearance, is inelastic, and is somewhat cooler than that covering the thigh. No serum escapes from the skin, no ulcer or eruption is present, and the veins are not varicose. He never contracted syphilis or had gout,

but has suffered to some extent from chronic rheumatism, and has used alcoholic stimulants in moderation. Arcus senilis, the ring of fatty material deposited around the circumference of his cornea, is well marked; his radial arteries feel inelastic and cord-like. His urine has been examined, with a negative result. From his history and symptoms a diagnosis of atheroma is readily made.

Atheroma is a disease of the arteries, seldom of the veins, and is marked by a peculiar degeneration. There are two varieties of the disease, the *senile* and the *premature*. The first is frequently observed in persons over fifty years of age; the second may begin as early as thirty years, and is usually the result of alcoholism. Males suffer more frequently than females, and the disease seems to be more common among the people of Great Britain and France than among the natives of the United States. The lesion is most commonly observed in the arch of the aorta and in the cerebral, coronary, brachial, radial, ulnar, iliac, and tibial arteries. When the cerebral vessels are implicated, apoplexy is liable to result.

Atheroma is marked by three stages,—infiltration, fatty degeneration, and calcification.

The deepest layers of the internal coat of the artery are generally selected as the point where the infiltration begins. From thickening of these layers, the tunica intima is pressed in the direction of least resistance in the shape of flat, irregular projections, which encroach upon the lumen of the vessel. This thickening is produced by multiplication of the cell-elements in the intima, some of which originate from active proliferation of the connective-tissue corpuscles, and others probably migrate from the vasa vasorum. Hardening of the tunica intima follows, with decreased nutrition, resulting in retrograde changes both of the new and the old elements, marked by fatty degeneration. If a diseased vessel should be laid open at this stage, it will present spots and streaks of yellow or light-gray color and will have a greasy feel. While this change is taking place in the intima, cell-infiltration goes on in the adjoining coats of the vessel, advancing to fatty transformation of the cells and changes in the intercellular substance of the connective tissue, resulting in a soft, pulpy material, called an *atheromatous abscess*. Finally, layer after layer of the intima becomes disorganized, and the broken-down, purulent-looking mixture is discharged into the blood-current. The opening which is formed, and which extends to the middle coat of the artery, is called an *atheromatous ulcer*. In advanced cases of atheroma all the coats of the vessel in turn become involved.

Following the fatty degeneration comes a deposit of lime-salts, or *calcification*, which is by no means uniform in extent. There may be numerous small grains, or, as I have frequently observed, large scale-like plates, giving the appearance of a tiled roof to the surface of the vessel. The deposit may encircle the artery in rings, which finally become united, making a tube almost stony in hardness. Examples of such a condition have been seen in the arteries of the extremities.

Any vessel invaded by atheroma soon loses its elasticity and firmness, dilates unequally, and may easily be torn.

Some difference of opinion exists in regard to the operation of causes in producing atheroma. In my judgment, the inflammatory origin of the disease is the most probable; also that alterations in the constitution of the blood and fluctuations in arterial strain are predisposing causes. Rheumatism, gout, and syphilis are agents in its production; but, in my experience, alcohol has been more actively concerned than all other causes combined, especially in the variety which I have termed "premature."

The calcified plates sometimes narrow the calibre of an artery to such an extent as to cause *thrombosis*, or the formation of a clot, at the constricted portion. Cerebral embolism may be caused by a little fragment of a clot becoming detached and being swept into the cerebral vessels. When thrombosis occurs in the vessels of one of the extremities, pain, loss of heat, numbness and stiffness of the limb announce the condition, which may terminate in gangrene. Atheromatous ulceration may open an artery and cause death from hemorrhage. Dilatation of arteries, hypertrophy of the left ventricle of the heart, false or dissecting aneurism, loss of temperature, cramps of the extremities, and mortification can be added to the evils which are apt to result from atheroma.

Now, what shall be done for our pa-

tient? As the vessels have been unable to control the circulation of the blood, œdema and formation of imperfect connective tissue have resulted. In order to give support to the vessels and remove these products, an elastic bandage will be applied from the toes to the knee. Each day it will be removed and the limb washed, as the rubber provokes considerable sweating. No remedies of which we have knowledge are capable of curing the existing disease. Much may be done palliatively by attention to all the functions of the body and directing the patient to lead a quiet life, in order not to excite the heart and cause increased arterial tension. As an article of diet, milk is supposed to be of special value, as the lactic acid which it contains may tend to limit the formation of lime salts.

FIBRO-LIPOMA OF THE HAND.

Between three and four months ago, this robust man, æt. 40, noticed an enlargement on the dorsal aspect of his left hand, at the distal end of the metacarpal bone of the little finger. The growth has steadily increased until it has become about half an inch in thickness by one inch both in length and width. It has not interfered in any way with the freedom of the fingers in working, and has been painless. The skin covering the growth is natural in appearance; while the tumor itself is insensible to pressure, has a soft, doughy feel, a somewhat lobulated surface, is freely movable, and has well-defined borders. When I firmly compress the mass between my thumb and fingers, you observe a peculiar dimpled appearance of the overlying integument. This is a very characteristic feature of lipomata, for we have to deal with a fatty tumor, which has selected a rather unusual locality. Bursæ or ganglions frequently are observed along the line of a tendon, but usually they are elastic, slightly painful on motion, and somewhat tender on pressure.

Fatty tumors exhibit a peculiar predilection for the back of the neck, the shoulders, the nates, and the inside of the arm and thigh. Frequently they are multiple, and then rarely attain any large size; but when single they may increase to great magnitude. When allowed to grow undisturbed, lipomata will insinuate themselves into every fissure at hand, so that the real size of such a growth may not be fully appreciated prior to the operation for its removal.

The hand has been thoroughly cleansed, and is being washed with mercuric chloride solution (1 : 1000). I have carefully dissected the growth from its attachments, and have not opened the sheath of the extensor tendon over which it was situated. Tendons are often very intolerant to operations, especially if the wound is an open one.

The tumor is composed of fatty and some fibrous tissue, constituting the *fibro-lipoma;* but in this growth the fibrous material is small in quantity.

Interrupted silver-wire sutures are now being used to approximate the edges of the wound, which will be dressed with lint moistened with carbolized oil, and the hand will be placed on a palmar splint.

TRANSLATIONS.

NEW TREATMENT OF YELLOW FEVER.—Dr. Lienais, of Cape Haytien, read a paper before the Society of Medicine of Nantes, March 5, 1886, with regard to some new points in the treatment of yellow fever, in which he gives the details of a treatment which he had found efficacious. Accepting the doctrine of Freire, that the disease is due to bacterial infection (micrococcus xanthogenicus), he attributes the jaundice to an action of these micrococci upon the red blood-cells, destroying them by acting upon the hæmoglobin and producing a yellow substance, "hæmapheine" (of Gluber). This substance produces the yellow stain which has been attributed to bile-staining. The fibrin disappears also, and the blood, being more fluid, readily extravasates, causing passive congestions and multiple hemorrhages. Hemorrhage into the stomach gives the "coffee-grounds" appearance to the vomited matters. Congestion of the medulla oblongata brings on troubles of sensation and circulation and the hepatic lesions constantly shown at the autopsy. The author sums up his treatment as follows:

The tincture of the chloride of iron is given in doses of twenty to forty drops daily, and to aid its hæmostatic effect sulphuric-acid lemonade is also given. If there is much fever, quinine is given night and morning (fifty centigrammes, or gr. viij); bromide of potassium is given in

the early part of the night (gr. xxx); and a hot foot-bath is given night and morning. Citrate of magnesia may be given for headache. Food should be confined to a cupful of broth given two or three times a day. The order of treatment is as follows: at 3 A.M., the quinine sulphate; at 6 A.M., a pediluvium; at 7 A.M., a mild purgative; at 10 A.M. and at 6 P.M., the potion containing iron, and in the intervals the broth may be given; at 6 P.M., another foot-bath; from 7 to 9 P.M., the potassium bromide; and every two hours the face can be cooled with camphorated spirits. For drink, sulphuric-acid lemonade. In four or five days convalescence begins, and the patient gradually returns to his usual health.—*Gazette Méd. de Nantes*, No. 5.

MEDICATED INHALATIONS IN PULMONARY TUBERCULOSIS.—Dr. Renzi, of Naples, having made experiments with iodoform and terebene (one to twenty-five), from two to six drops every two hours, (2) iodine, volatilized in a steam bath (from six to thirty grains in a room), (3) sulphuretted hydrogen, and (4) sulphurous acid, obtained by burning sulphur, concludes as follows:

1. Inhalations of iodine and those of iodoform with terebene ameliorate the local condition and nutrition without modifying the fever, the diarrhœa, or the night-sweats.

2. Inhalations of sulphuretted hydrogen and those of sulphurous acid augment the general strength, improve nutrition, and increase the urinary secretion. The former has a special action upon respiration, diminishing its frequency and controlling cough. Fever, diarrhœa, and sweats are uninfluenced by it.

3. Until more experience is obtained, the author would place in the first rank the inhalations of terebene and hydrogen sulphide.—*Bulletin de Thérapeutique*, March 1, 1886.

NEW OBSERVATIONS UPON THE ETIOLOGY OF ECLAMPSIA.—At a meeting of the Société de Biologie, MM. Doléris and Butte communicated the results of some chemical and experimental observations upon eclampsia, made upon five patients. In the first four examined the authors found, in the ethereal extract of the blood treated with dilute acid, a crystalline substance, which was inorganic, or at least partly so, soluble in ether and in acidulated water, insoluble in water, very slightly soluble in alcohol, and which did not behave like a ptomaine as regards certain color-reactions. These crystals are toxic, and may kill rats and sparrows rather quickly, even in almost infinitesimal doses; the symptoms being first a stage of excitation, then a period of somnolence, followed by death in five or six hours. In the fifth case of eclampsia the crystals were not detected. In the first four the proportion of urea in the blood was not excessive, and was, moreover, considerably lower than in the last one, in which no crystals were found. This analysis indicated that the accumulation of urea in the blood is too slight to enable us to attribute to it a *rôle* in the pathogeny of eclampsia.—*Le Progrès Médical*, No. 9.

A NEW METHOD OF CULTIVATING THE BACILLUS TUBERCULOSIS.—At a recent meeting of the Paris Biological Society, Professor Nocard, of Alfort, stated that he had succeeded in cultivating the bacillus tuberculosis. On pursuing Koch's method, he arrived at negative results. He therefore modified the cultivation-medium by adding one per cent. of peptone to horse serum, 0.25 of sugar candy to a hundred parts of serum, and the same proportion of sodium chloride. These additions were made before gelatinization was effected. The first three cultivations were made according to this method; the fourth was effected in pure serum of horses' blood, but the process was slower. M. Vignal pointed out that the addition of sugar, sodium chloride, and peptone to serum indicated a completely new medium of cultivation.

PRURITUS VULVÆ.—In addition to appropriate systemic treatment, when indicated, local applications of hot water by sitz-bath or douche are recommended, followed by an application of the following:

℞ Amyli glyceriti, 30 grammes;
Zinci oxidi, 6 grammes;
Potassii bromidi, 10 grammes;
Ext. cannabis indicæ, 2 grammes. M.

When acne accompanies the pruritus, the application night and morning of black soft soap for half an hour, followed by douche of water, and then by a lotion of strong infusion of black tea, has been tried with satisfactory results.—*Gazette de Gynécologie*, No. 4.

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, APRIL 17, 1886.

EDITORIAL.

THE SUPPRESSION OF ILLEGAL MEDICAL PRACTICE.

A PAPER was read by invitation, this week, before the Medical Jurisprudence Society, by Dr. J. F. Edwards, the energetic chairman of the standing Committee on Hygiene and the Relations of the Profession to the Public of the County Medical Society, in which an account was given of the steps which have been taken during the past year to suppress illegal practice in Philadelphia.

The work which the Committee has done in this direction is too important to be allowed to pass unnoticed. A graceful acknowledgment of appreciation of the work already accomplished was given by the unanimous vote of the County Medical Society, at its last meeting, to devote the initiation-fees of the present year to the uses of the Committee in prosecuting illegal practitioners of medicine in Philadelphia County. The policy of the Committee has been, except in flagrant cases, not so much to bring illegal practitioners into court for the sake of securing conviction, but rather to hold the offender before a magistrate and effect a compromise by which he agrees to discontinue his practice, the suit being suspended during good behavior. The details of several such cases were given by Dr. Edwards in his report to the Medical Jurisprudence Society, and the practical wisdom of the course pursued by the Society was fully exemplified by the results obtained. By this means the Committee is likely to attain in a great measure the end in view —the suppression of illegal practice in this city—with the least expenditure of money and effort, and without exciting public sympathy for offenders by enabling them to raise the cry of persecution.

THE QUESTION OF ABDOMINAL SECTION FOR ACUTE INTESTINAL OBSTRUCTION WHEN COMPLICATED WITH PERITONITIS.

THE epidemic of laparotomy, which is said to rage among the gynæcologists, has at least the compensating virtue of encouraging operations upon the peritoneal cavity in general surgery, which have led to brilliant successes. The taboo has been taken from the peritoneum, as it had been from the pleura, and the fact has been demonstrated that with proper management the peritoneum is remarkably tolerant of manipulation and injury. The existence of acute general peritonitis, even, does not act as a bar to the operation of laparotomy, provided that the attendant circumstances demand it. A case was shown at the Clinical Society of London, by Mr. A. E. Barker, which illustrated this point. The patient, a man twenty-three years of age, while in a condition of complete obstruction of the bowels and acute general peritonitis, had abdominal section performed and an intussusception of the ileum reduced; the inflammatory products were then mopped out of the peritoneal cavity with sponges moistened with carbolized water, and the wound was dressed with salicylated cotton and iodoform. The acute symptoms were immediately relieved by the operation; the good results being attributed in part to the previous treatment by opium and enemata, the comparative state of rest in which the bowels were placed, and the performance of the operation at the earliest possible moment when it was evident that other means had failed. Mr. Bryant, complimenting Mr. Barker upon the success of his treatment, stated that he did not consider the peritonitis a bar to the operation.

PRESCRIPTIONS IN COURT.

IN the case referred to in the last issue of the *Times*, in which Dr. Carl Seiler was sued for condemning a proprietary medicine in his address delivered at the College of Pharmacy, Judge Arnold, after hearing the plaintiff's case, directed the jury to bring in a verdict for the defendant. Two interesting points were made in the charge to the jury. In the first place, it was declared as the law of Pennsylvania that a scientific lecture before students or a medical association is not only privileged, but a highly-privileged communication, and that malice must be shown to exist in order to render the lecturer liable for an expression of opinion under such circumstances. Secondly, a druggist having been subpœnaed to bring some of Dr. Seiler's prescriptions into court, the judge decided, without opening the question of ownership, that they could not be made public, as they were essentially confidential and private communications to the druggist.

Judge Arnold also held that the plaintiff's attorney had no right to publish the weaknesses or maladies of patients of Dr. Seiler, and refused to allow him to examine the prescriptions. This was clearly a just ruling; for if innocent persons could be held up to ridicule or criticism whenever an attorney demands that a druggist shall produce his prescription-file to be examined and commented upon in open court, it might ruin the business of the apothecary and seriously hamper physicians in their professional duties.

REPORTING CONTAGIOUS DISEASES.

BY Act of Assembly it is the duty of physicians to make prompt returns of all pestilential or contagious diseases to the health officer. A circular has been issued by Major M. Veale, Health Officer of Philadelphia, calling attention to the fact that the Board of Health, by resolution, has designated the following diseases to be reported, under a penalty of fifty dollars for neglect to comply fully and promptly with the law: Asiatic cholera, relapsing fever, typhus, cerebro-spinal meningitis, variola and varioloid, scarlatina, diphtheria, and typhoid or enteric fever. Blank forms have been provided, and official envelopes (not requiring stamps), which will be furnished upon sending or writing to the health officer.

By the prompt attention of physicians to this duty of reporting contagious and pestilential diseases, the work of the health board will be greatly facilitated. An officer has been appointed to make sanitary inspection and to disinfect premises where contagious diseases exist, and a physician may render valuable service to the community by indicating where disinfection is needed. This notice is thought necessary, since many physicians are unfamiliar with the requirements of the law, and are not aware that it is just as obligatory to report typhoid or scarlet fever as smallpox or cholera.

PHYSICIANS REQUIRED TO REGISTER IN THE PLACES WHERE THEY REGULARLY PRACTISE.

AN interesting case under the registration law came last week before the court in Lebanon County. The defendant, who was practising part of his time, and had an office, in Lebanon County, was arrested for non-compliance with the act of 1881, and pleaded a registration in Berks County as conferring upon him the right to practise anywhere in the State of Pennsylvania. Judge McPherson, before whom the case was tried, ruled that the defendant had a residence in Lebanon County within the meaning of the act requiring physicians to register their diplomas with the prothonotary of the county in which they reside, and imposed a heavy fine upon him because he had not also regis-

tered in Lebanon County. The case has been appealed, and will probably come before the Supreme Court for its decision whether or not a physician is required to register his diploma in more than one place when he practises regularly in several.

NOTES FROM SPECIAL CORRESPONDENTS.

PARIS.

PASTEUR'S Experiments.—Europe is so much taken up with M. Pasteur's work that it is impossible not to mention it again in writing from Paris. The English House of Commons has considered the matter, and has declared that "the recognized eminence of M. Pasteur as a scientific investigator justifies a careful examination of the results obtained by him." Vienna also comes forward with a proposal of the Princess Metternich that medical men should be sent to Paris to study the new method of treating hydrophobia; while the Hungarians have already sent two doctors here.

In Italy and elsewhere large sums are being raised towards the "Pasteur Institute" which was formed at one of the late meetings of the Academy of Sciences. A committee has been appointed to open a public subscription to found a permanent establishment in Paris to be called after M. Pasteur, and to be devoted to the treatment of all persons, French or foreign, who may have been bitten by mad dogs or other animals. The principal government officials and the heads of the Bank of France and Crédit-Foncier will receive subscriptions. Already a very large sum has been raised, so that the success of the enterprise seems assured.

The American colony has organized a banquet to M. Pasteur, at the Stanley Club, for April 14, which will be presided over by our minister, Mr. McLane. M. Pasteur himself was very warmly applauded at the late meeting of the Academy when he announced that his treatment had been attended with happy results in three hundred and twenty-four out of three hundred and twenty-five cases. The single fatal issue was due to the fact that his services were called for too long after the accident. In his speech, curious details were given of some of the cases treated. One, a very convincing test of the mode of inoculation, was that of a boy named Jullion, who lives in Paris. He was set upon by a large and furious dog, and commenced to scream out, and the animal's lower jaw entered his mouth and tore the child's upper lip open, and the dog's fangs entered deeply into the palatine bones; at the same time the poor boy's nose and eye were injured by the dog's superior maxillary teeth. Here was a case in which cauterization was impossible, and the dog, on being killed, presented all the signs of rabies. This happened on the 30th of November, and the boy to-day is all right after the treatment. Among the number treated were several from other countries,—a Dr. John Hughes and others from England, the children from Newark, America, etc. M. Pasteur said he thought "that it would be all that is needed to have an international hospital here in Paris, as he had treated patients from New York and far countries in Europe." His closing words at the Academy deserve perhaps more attention from medical men than his treatment of hydrophobia, which, after all, they are not often called upon to treat. He said, "It seems to me that what takes place in rabies ought to have analogous consequences in other maladies, and it will be well to see if, for instance, diphtheria cannot be treated according to the same principles." It will indeed be a great thing if M. Pasteur, who is not a doctor, can show us how to cure diphtheria.

Researches into the Prevention of Phthisis.—Another matter that deeply interests us is Professor Verneuil's effort to raise a fund for special researches and experiments to discover a means of preventing that terrible disease, phthisis.

Although the experiments are not to be made in any single direction, it may be inferred that Dr. Verneuil counts principally on a system of inoculation of the malady to render the patients refractory to the disease, similar to that practised with so much success by M. Pasteur. However hopeless the task may appear to all, the attempt deserves to be encouraged, and it is to be hoped that Professors Verneuil, Cornil, Bouchard, and others who have taken the work in hand will not be embarrassed for want of funds.

Following the same subject, at a meeting of the Conseil d'Hygiène last week a committee was appointed, including Professors Trélat and Proust and Dr. Dujardin-Beaumetz, who were charged to make researches to see what could be done to stop the development of pulmonary phthisis.

The following resolutions were adopted:

1. The most active agent in the transmission of this disease resides in the sputa.

2. Care must be taken not to allow this expectoration to be thrown on the ground nor on linen, where it may be transformed into dangerous dust.

3. We recommend, therefore, that patients be instructed to spit into utensils containing sawdust, and that these are to be emptied and washed once a day, and their contents are to be burnt.

4. Any room which has been occupied by a phthisical person should, after his death,

be disinfected with sulphur before it is again occupied, and all linen must be steamed.

How to Prevent Colds.—Dr. Brown-Séquard, speaking at the Société de Biologie, gives a prophylactic method against accidents that are produced by cold. He said, "The neck is one of the most sensitive regions of the body, and it is not doubted by any one that a large number of cases of bronchitis, etc., are reflex phenomena from the impression of cold on the nerves of the skin in that region. To prevent these troubles, the sensibility to cold must be diminished: that is the best means that can be indicated. To this end I have advised several of my patients to blow air on the neck from a blower, at first using warm air and gradually cooling it off. In ten sittings most of them had become so accustomed to it that they became quite impregnable to the action of cold." [In America, water is generally used instead of air for the same purpose.]

Paris Theses—Abortive Medication.—In a former letter we gave some account of the *concours* now going on for the places of Professor (*agrégé*) of Medicine. The trial is now coming to an end, and the candidates are publishing their theses. As they have hunted up almost everything that is printed on the subject given, some extracts will no doubt be interesting. The first one we read over was by Dr. De Beurmann, on "Abortive Medication." It is defined as a medication that proposes to interrupt the malady at the moment of its natural evolution. In a general way this should always be our object; but, as we have as yet but very little real knowledge of the cause and nature of disease, abortive medication is still in its infancy. The day that pathogenesis becomes a precise science, then abortive medication will dominate all other forms. It is towards the coming of this sort of rational therapeutics that all should bend their efforts, and it is for the same reason that all are at present following out the pathogenic problem. To prove the legitimacy of these hopes, M. de Beurmann passes in review some of the diseases against which abortive medication has been directed with the most effect. One of the most striking examples of the efficacy of such medication is taken from ocular pathology: purulent ophthalmia in new-born children is cured at once by the first cauterizations made with nitrate of silver wash, in a dose of eight grammes to one hundred grammes of pure water. This action of nitrate of silver is explained by the fact that the salts of silver act very energetically on all the inferior organisms, so that the gonococcus of the conjunctiva is rapidly destroyed by the caustic.

The same medication acts in a similar way in blennorrhagia, but the caustic injection used in such cases does not act so well, because it cannot penetrate entirely to the depth of the urethral follicles. In passing, here we might also notice Dr. Le Fort's mode of aborting a furunculus: when he can get the blind boil in its first stage he gives it a very deep lancet-cut, and this often cures, but if it have already taken on much inflammation it is too late and it must open. The eradication of malignant pustule is in the same way very efficacious. Here profound cauterization is made, followed by injections of iodine; but it is probable that success principally depends on the resistance of the human organism to the infecting agent. The interesting question of syphilis-abortion receives its share of attention; but, while M. de Beurmann thinks that mercury acts on the specific virus, he is not prepared to say that the real pathogenic agent has as yet been discovered for this disease. Tuberculosis only opens the door on one side to the method of abortive medication,—that is, where it is localized,—but the results are good in anatomical tubercules, lupus, cold abscess, etc. It is true that it is doubtful if the cures made will prevent general infection, but nevertheless the distinction should be made between local and curable cases and general and mostly incurable ones. In puerperal infection antiseptic injections (intra-uterine) have made a number of successes. The recent results obtained prove that rabies can be aborted. Pneumonia is one of the affections that has been so often the seat of experimentation that we all know the method by the use of tartar emetic. Broussais advised bleeding, which was pushed to an extreme. Recently cold baths were advised and are still used in Germany. M. Lépine has just tried a new method, which consists in making antiseptic injections directly into the lung through the walls of the chest; but this method is as yet too new to be judged. Typhoid fever has not been actually aborted, by any means, but to approach the rational method the nearest M. de Beurmann advises the method followed by Professor Bouchard: that is, *general antisepsis*, by giving pills of calomel (forty centigrammes in twenty-four hours), and then *intestinal antisepsis* by the ingestion of glycerin mixed with charcoal which is iodoformed; naphthaline is also given in doses of five grammes a day. Against articular rheumatism there is a real abortive medication, salicylate of soda, but its action is not at all well established; at the same time it must be considered as well as mercury in syphilis and quinine in fever as an abortive agent, because it acts against the pathogenic agent.

"*Toxic Paralysis.*"—This is the title of another paper by one of the aspiring professors,—a Dr. Brissaud. He states that the real toxic paralysis is caused by some mineral, vegetable, or animal substance, and it is characterized clinically by muscular resolution and anatomically by peripheric lesions. In a general way, it in most cases affects some of the muscular groups, and mostly those of the

members. The legs are invaded first, except in saturnism, which is known by the manifestation in the forearm muscles. It may be added that it is the extensor muscles that are attacked almost constantly. The abolition of all tendon-reflexes is the rule also in toxic paralysis, and if the disease runs on several weeks muscular atrophy comes on.

Charcot has shown that there are three orders of muscular alterations, which consist histologically in a proliferation (interstitial) joined to a degeneration of the proper elements of the contractile substance. Taken separately, these troubles present certain characters which are interesting to study.

Alcoholic Paralysis is always accompanied by sensory and psychic troubles which are of great importance, so that the whole of the symptoms are those of chronic alcoholism, in which the paralysis is only one symptom that has its rank with the others. The general character of this toxic paralysis is, that it attacks the *lower limbs* in preference, it is localized in the extensors and gives a certain predominance to the flexors, so that a certain attitude results which has given rise to the expression of alcoholic pseudo-tabes. It differs decidedly from what is observed in real tabes; but any doubt of it will soon be cleared up by the subsequent course of the malady: in the tabes case the disease will continue its slow march, while in the alcoholic case it will usually improve under treatment.

The medical treatment is—first, the removal of the poison, whatever it may have been, and, secondly, avoidance of the further absorption of the poison, and, locally, stimulation to the muscular contraction by electricity in the static form and by massage.

Ptomaines and Microbes.—The discussion on this subject continues at the Academy of Medicine. M. Colin (of Alfort), the distinguished physiologist, read a paper in which he proposed to establish that it is not possible to attribute to microbes only the production of septic and morbid states in the human body. What made him doubt that microbes were the cause of disease, and even to think that their importance was greatly exaggerated, was the fact that they are always associated with other matters which are very toxic in their action, and which will produce death in animals if injected into their skin or if they are made to swallow them.

If this could be done with pure vibrios that have been isolated and given in pure water, M. Colin said he could then understand it; but this cannot be done. Again, in plenty of virulent diseases no bacteria are found, and every symptom passes just the same as when they are present. Microbes do not exist in the virus of rabies nor in vaccine, and, indeed, it is not at all sure that they are present in cholera and typhus. Then, what makes M. Colin doubt still more is that they are found in plenty of the diseases that are *not virulent* and *not transmissible* by inoculation: so that here they cannot be in any way the living agents of contagion. Everything considered, it seems that not one of the *rôles* attributed to these microscopic beings can be proved. Even if those found in *charbon* seem to be the real agent, we have no right therefore to draw a conclusion that all diseases are so derived from some microbe.

After all, who has shown that they can give proofs of the part acted mechanically, chemically, and physiologically, that is attributed to these microbes? Who can show that they embarrass the circulation, when they are smaller than the smallest *débris* of the white globules, that has no difficulty in passing on in the vessels? Who can show that they absorb oxygen from the blood when they are called anaerobies? How do they know that they manufacture ptomaines or any other poison? No one can find them. Has any one shown that they secrete the ferment? No. In place of giving demonstrations they bring us simply some hypotheses. We must no longer think of miasms, nor putrid matters, nor virus, nor alteration of the blood, nor deleterious gases: no, if they don't find the microbe, they suppose its existence. They don't see it enter the economy, but assert that it does so. The power of the living cell, which *we can see*, and its protoplasm, must give way before the omnipotence of the bacteria. M. Colin said it seems that we had better attach ourselves to obscure points in pathology, and clear them up, in place of taking up time in studying any one of the elements, microbes or the poisons. None of them can give the reason for the pathological facts that we are ignorant of. Suppose the body does produce poisons; well, it also knows how to preserve itself from them in destroying them and in eliminating them, even if it is saturated with those that may come from respiration, secretion, or nutrition. It also resists all sorts of microscopic beings that come in with the water and every mouthful of food we take.

Professor Cornil, who is the apostle of the other side of the question, read a work of M. Doyen (of Rheims) relative to various diseases claimed to be of bacterial origin. He said, "For five years I have made a study of a large number of suppurations and different septicæmias, and find that they are all due to a direct and local action of pathogenic microbes. Phlegmon and all such suppurations (whitlow, etc.) are characterized by the presence of different microbes (*Staphylococcus aureus* and *albus*, and *Streptococcus pyogenicus*, etc.). The same thing occurs in putrid abscesses, and in the pustules of acne, etc.; I have always found the blood to contain these organisms at autopsies, and I have never been able to attribute any septicæmia to the action of ptomaines. It is difficult to

explain the mode of action in this infection. A fistulous opening may be suspected, for instance, in the leg, but auto-infection is not to be admitted. I have a patient at present who is attacked with a purulent affection from a slight cut in his finger. Without doubt he got his streptococcus from the air, or from the cattle he was taking care of. Puerperal fever is only a variety of septicæmia, and has always one of three kinds of microbe, and they are those that are found everywhere in the air and in certain liquids that are decomposing. If all wounds suppurate easily, even in the country, it is owing to some form of microbe, and enough will be found in the vulgar dungpile to eternalize any disease that may be contagious. The injections made of the broth from putrefied meat which produce death do not prove that it is exclusively the ptomaines that act."

Professor Cornil added that he thought that puerperal fever was not a single affection. We find that some are the result of pyæmia, and the autopsy will show a subacute peritonitis, or even a pleurisy. Others are real intoxications of the whole organism, determined by bacteria and by the toxic alkaloids formed by their influence. The micro-organisms penetrate by the uterine wound, and they produce their action accordingly as the pregnancy has modified the uterus and troubled the human body.

Death of a Savant.—The death is announced of Dr. Bouchefontaine, the chief of M. Vulpian's laboratory at the Hôtel-Dieu. He was a determined adversary of the theory of contagion by bacilli, and during the panic, a year ago, about the cholera, we wrote about his practising a very repulsive experiment on himself, that of swallowing some of the famous cholera bacteria, to support his arguments. It did him no harm, and he has since tried all sorts of hardy experiments on himself with various drugs; and it is possible they may have hastened his death, owing to the frequent ordeals to which he submitted his stomach in the interest of science. He was only about forty-five years of age. We have also to announce the death of Dr. William E. Johnston, a well-known American physician of Paris, where he had practised for some twenty years. He was always welcome at every gathering of Americans, and is deeply regretted.

The "Congrès Français de Chirurgie" will hold its second session in Paris from the 18th to the 24th of October, in the large amphitheatre at the Faculty of Medicine. The principal questions that are on the order of the day are—Nature, Pathogenesis, and Treatment of Tetanus; Nephrectomy; Orthopædics; Resections; Operative Intervention in Irreducible Luxations, etc. All papers must be sent in by the 15th of July next.

THOMAS LINN, M.D.

PARIS, FRANCE, March 15, 1886.

WASHINGTON.

WASHINGTON, April 3, 1886.

AT the last meeting of the Naval Medical Society, which was held at the Museum of Hygiene on the 1st instant, Medical Director A. L. Gihon read an interesting paper on "Kola as a Therapeutic Agent." Through the courtesy of the author of the paper, I am enabled to give the following information about this new remedy.

The kola of commerce is the seed of the fruit of the *Sterculia acuminata*, a tree from thirty to sixty feet in height, indigenous to the west coast of Africa and the neighboring territory between Sierra Leone and the Congo. The ripe fruit is a brownish-yellow pod, from three to six inches long and about two and a half inches wide. This pod contains from five to fifteen red or white seeds, each weighing between five and twenty-five grains. The tree flowers continuously, and the nuts are collected twice a year.

Among the most singular of the properties of kola first brought to notice was that of clarifying and improving beer and spirits. Heckel and Schlagdenhauffer attribute to it the further property of purifying foul water, and of rendering tainted meat edible.

The physiological effects attributed to the drug are somewhat similar to those ascribed to coca. Its use is said to enable the natives of the west coast to endure prolonged exertion and upon a mere modicum of food, while the whites living among them believe they escape the deleterious influences of the climate by chewing a small quantity before their meals. The negroes themselves consider it a sure prophylactic against dysentery. Among the men on the estates and in the garrison-towns of the West African settlements, kola has the apparently well founded reputation of dissipating the effects of an alcoholic debauch. From what is now known of its therapeutic properties, it is undoubtedly true that it does overcome the stupefaction and confusion of intellect which follow drunkenness. It is even maintained that it destroys the appetite for alcoholic drinks, and that after the use of the kola cure a drunkard cannot return to his cups for some days without being nauseated. Finally, the natives believe it to possess aphrodisiac powers.

The kola-nut plays an important and interesting *rôle* in the social life of many of the African tribes. The following particulars are given in a paper contained in the *Pharmaceutical Journal*. An interchange of white kola between two chiefs is indicative of friendship and peace, whilst the sending of red kola is an act of defiance. An offer of marriage is accompanied by a present of white kola for the prospective mother-in-law; the return of white kola signifies acceptance, while red means rejection. The absence of kola from among the marriage-pres-

ents would tend to nullify the agreement. All oaths are administered in the presence of the seeds: the negro stretches out his hand over them while he swears, and eats the seeds afterwards. No explanation has yet been given of the curious part played by kola in these hymeneal and testimonial transactions; but Dr. Gihon offers the suggestion that the reputed aphrodisiac property of the seeds and their resemblance to the testes make it probable that the ancient Hebrew custom of "putting the hand under the thigh" and swearing upon the testes as witnesses is here more decorously symbolized.

In the form of "kola-paste," which much resembles chocolate, but has a less agreeable odor, it is now found in the market. A specimen of this was placed in Dr. Gihon's hands by the Surgeon-General of the Navy, who desired observations upon the therapeutic effects of the drug. Dr. Gihon administered it to a case which is described as presenting the group of symptoms designated collectively as neurasthenia. The patient was a lady whose nervous equilibrium had been very seriously deranged, and who suffered with excruciating headaches, attended with nausea, loss of appetite, great despondency, insomnia, palpitation of the heart, intercostal neuralgia, and perturbed secretions. Under the use of the remedy these symptoms, which had resisted the previous exhibition of quinine, arsenic, iron, bitter tonics, guarana, and diffusible stimulants, quickly disappeared. The headache, which had been recurrent after temporary relief, did not return; the appetite was recovered, muscular vigor regained, and the mental dejection markedly relieved. The patient enjoyed refreshing sleep, and the secretions became normal. The remedy produced neither gastric disturbance nor constipation, which had followed the previous use of chocolate.

The method of administration of the remedy was similar to that of chocolate. The paste was triturated with sugar and dissolved in boiling water, making, with the addition of a sufficient quantity of the ordinary vanilla flavoring extract to cover the somewhat disagreeable odor and taste, a rather pleasant beverage. It was taken hot, in doses of ten to fifteen grams of the paste twice a day, between breakfast and luncheon, and again between the latter meal and dinner. If the decoction is allowed to cool, a yellowish gum separates, which is not dissolved on reheating, and which is extremely unpleasant. The trituration must be thorough, to avoid grittiness and imperfect solution.

The remedy deserves a more extended trial in cases of this character, which are confessedly so difficult to bring under the influence of therapeutic agents.

The sixth and last volume of the "Medical and Surgical History of the War" has just been completed by Dr. Charles Smart, surgeon United States army, who has been constantly engaged on this work during the past two years and nine months. The volume, which is already in the hands of the printer, will contain between eight hundred and nine hundred large quarto pages, and will be abundantly illustrated with chromo-lithographic plates, photographs, cuts, maps, diagrams, and tables. The work is divided into chapters on paroxysmal fevers, continued fevers and allied diseases, diseases of exposure (such as pleurisy, bronchitis, rheumatism, etc.), eruptive fevers, miasmatic fevers not included in the above classes, scurvy, local diseases (of the heart, lungs, kidneys, liver, etc.), unclassified diseases (nostalgia, army itch, alcoholism, venereal diseases, etc.), and a section on the general hospital system developed during the war. This traces the gradual evolution of the pavilion hospital, as it was when the war ended, from the imperfect beginnings of 1861. Some of Dr. Smart's diagrams which I had an opportunity of examining are most interesting. For example, the prevalence of venereal diseases is shown to depend very largely upon opportunity. In the beginning of the war a considerable percentage of the diseases reported were of this class. This gradually declined to an insignificant proportion until 1864, when there was a sharp rise, again declining until about the middle of 1865, when the line runs up almost perpendicularly to the top of the chart. The explanation is that in 1861, before the recruits were sent into the field, Venus vulgivaga plied her trade with success among the patriotic hosts who had responded to the call for "three hundred thousand strong." After the actual business of war began, no opportunity was furnished for the communication of the diseases of the sexual organs until the first enlistment of the three-year men had expired, when the thirty days' furlough and a good supply of cash enabled those who re-enlisted to pay up for their enforced continence by excesses the effects of which were manifest in the rise of the morbility line in 1864. Another period of active field-service was again accompanied by a decline in the venereal-sickness-rate until near the final muster-out, when, with well-filled pockets and a light heart, "Johnny came marching home."

The curve of typhoid fever shows similar interesting features, which are all clearly discussed by the talented author.

A bill providing for the establishment of a Bureau of Public Health, under the control of the Interior Department, has been favorably reported to the House of Representatives by the Committee on Commerce. The bill provides for the appointment from civil life by the President of a Commissioner of Health, at a salary of four thousand dollars. This official shall collect various sanitary information from foreign and domestic sources, and

disseminate the same among the health authorities and others in this country; frame rules for the instruction of consular officers and medical officers serving at foreign ports; notify local quarantine authorities of the anticipated arrival of infected or suspected vessels; "make investigations, both in the United States, and, if necessary, in foreign countries, into the nature, origin, and prevention of contagious and epidemic diseases, as well as the causes and conditions of particular outbreaks of disease in the United States; and shall publish and distribute documents relating to the prevention of disease." Officers from the several departments of the public service may be detailed by the President for duty in the Bureau of Public Health, or, when a detail of suitable officers cannot be made, civilian experts may be employed.

Seventy-five thousand dollars are appropriated to carry out the provisions of the act, which, if adopted, legislates the National Board of Health out of office.

The bill seems to have a fair prospect of passing, since it has the endorsement of the Committee on Commerce, and is in the special charge of Dr. Davis, of Massachusetts, a member of that committee.

The quarantine and local interference rocks upon which the National Board was wrecked seem to have been very carefully avoided in the drawing up of the present bill. No antagonisms have yet been developed; but it remains to be seen whether the officials now in office who may be affected by the passage of the bill will permit its adoption without a struggle.

The retirement of Surgeon-General Murray, of the army, next August, is already the occasion of considerable speculation concerning his probable successor. The ranking officer in the Medical Department is Dr. J. H. Baxter, chief medical purveyor; but Dr. Sutherland, whose name is also prominently mentioned, has been longer in the service. The choice will probably be made between these two.

The quarantine against smallpox on the Canadian frontier has been raised.

G. H. R.

PROCEEDINGS OF SOCIETIES.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

STATED MEETING, THURSDAY, MARCH 4, 1886.

The President, B. F. BAER, M.D., in the chair.

MENSTRUAL EPILEPSY.

DR. HOWARD A. KELLY exhibited recent specimens of tubal and ovarian disease removed within the past two weeks. The first specimens to which he called attention were removed from a patient 21 years of age, who has suffered from an aggravated menstrual epilepsy from the very first appearance of the function. There was no difficulty whatever in the removal through a small incision into which two fingers could just be slipped. The whole operation from beginning to complete closure took but twenty-four minutes. The right ovary was deformed by a very prominent nodule, about one and one-half centimetres in diameter, which burst on removal, discharging a watery fluid, and was shown by its lining membrane to be the last corpus luteum.

The second specimens are rare examples of

HYDROSALPINX WITH CONGENITAL DEFICIENCY OF TUBES AND BROAD LIGAMENTS.

In this case there was malformation of the distal ends of the tubes, broad ligaments, and ovaries. The left tube is as large as a bologna sausage. It was brought into view with great difficulty after separating many light adhesions to the pelvic walls; while the isthmus is much enlarged and thickened, the great distention is at the involuted ampulla. The operator was materially assisted in bringing this tube into view by upward pressure on the cervix by a hand in the vagina. The fimbriated extremities were lost in a mass of vascular and fibrous tissue forming a broad ligament, and deep down in this were embedded the somewhat hard, elongated, large ovaries. It was utterly out of the question to attempt a removal of the ovaries, and any such operation would have been of a very desperate character. Nor did he (Dr. Kelly) regret this in the least, as he had planned his operation for *tubal* disease, to which he attributed all the patient's sufferings. The right tube was as large as his middle finger, and was also distended with watery fluid.

The other specimen is a very large

HÆMATOSALPINX.

This tube, the left, about four inches long, burst as he was removing it, discharging four ounces of tarry blood. It was very adherent, having several attachments to intestine and omentum. The dilatation is here, too, seen to be at the ampulla, which extended far beyond the ovary back into the cul-de-sac. The ovary is embraced by the isthmus, and presents a curious appearance as it lies, about twice the normal size, embedded in a sort of ball-and-socket manner below the isthmus. Where it is laid open, the tube is converted into one large sac.

Dr. W. C. GOODELL had been surprised at the size of the tubes.

Dr. JOSEPH PRICE remarked that the tube was so large that the uterus had been pushed aside by it. Great care was required in its removal.

Dr. CHARLES HERMON THOMAS said that some time since he should not have recognized such a condition, but now he can,—the result of experience in bimanual examination. He would like to hear further on this point of diagnosis.

Dr. B. F. BAER thinks it very unfortunate that the ovaries as well as the tubes could not have been removed in the case just reported by Dr. Kelly, for their presence will probably result in the usual monthly congestion, and consequently the pain and other pelvic distress, for the relief of which the operation was performed, may continue to exist. There are several cases on record in which the tubes were removed and the ovaries allowed to remain, but the results have not been reported.

He can see no reason why this should be done, unless the ovaries cannot be found or some other insurmountable difficulty presents itself. He fully believes in the advantages of prolonged and thorough palliative treatment in these cases. Benefit usually follows, and sometimes cure; at least, operation is rendered less difficult and more likely to be followed by recovery of the patient both from the operation itself and the symptoms. Certainly the application of remedies such as iodine to the fundus of the vagina and the interior of the uterus, with prolonged rest and general building-up of the system, will have a strong influence in attenuating adhesions, promoting absorption of lymph, and possibly (if not probably) in cure of the patient without operation.

It should not be forgotten that removal of the tubes and ovaries in these cases does not cure absolutely in every case. He believes that we will be called upon in a few years by many of these cases which have been operated upon to relieve symptoms which still exist or have returned, and for the relief of which operation had been performed; just as we have been called upon from time to time and pestered by these old cases of chronic hypertrophy and retroflexion of the uterus with pelvic adhesions. He has now under his care one of his own cases, upon which he operated for the relief of symptoms the result of disease of the tubes and ovaries with pelvic adhesions. The patient made a good recovery and appeared to have been cured; but the symptoms have returned, and she is now complaining almost as much as before the operation. She also has periodical attacks of metrorrhagia. This, of course, is an unusual case. He has another patient under his care who was operated upon in a neighboring city by removal of the tubes and ovaries, and is treating her for the same symptoms of which she had complained before the operation. He is an advocate for the operation in some cases, but he pleads for due deliberation and the exhaustion of careful palliative and preparatory measures before operation is resorted to. Many cases will get well without operation; some will not be benefited by operation; and there is some danger in laparotomy, although Tait has had such remarkable success.

Dr. J. C. DA COSTA inquired if Dr. Kelly had tried the benefits of rest and treatment before operating.

Dr. JOSEPH PRICE said that the recurrence of symptoms seemed to indicate partial removal of the tubes and ovaries. One of the fundamental rules of surgery is to seek for pus when it is probably present, and in all cases to remove it if possible. When the ligatures will cut through the tubal stump on account of its cheesy character, hemorrhage may be prevented by the application of the cautery.

Dr. KELLY, in closing the discussion, said he did not in the least regret that the ovaries could not be removed, as he had operated for tubal disease and not for ovarian, and he admired the zeal of Schroeder, who, instead of always removing the ovary, sometimes resected diseased portions. In all the cases of tubal and ovarian disease upon which he had operated, months and years of careful treatment had been wasted, and now, where he diagnosticated pyosalpinx, the only delay he allowed was to put the patient in the best possible condition for operation. Topical, external and internal, treatment is utterly futile, and never does more than secure temporary palliation.

Dr. Kelly's reliance regarding diagnosis lay entirely in a skilled bimanual examination, by which he always accurately mapped out all the peculiarities of the case before operation. If there is rigidity and resistance, it is necessary to etherize; but he has yet to see the case, where the presumptive signs were those of tubal and lesser ovarian disease, where the structures could not be picked up between the two hands and outlined. He considers that this tact has been largely developed by persistently examining the condition of the appendages to the utmost possible extent as a routine practice in all cases which come under his notice. Introducing the finger as high as possible, by forcing the hand well under the pubic arch and carrying the sensitive pulp up against the post fornix or either lateral fornix, and then playing up and down with the other hand pressing on the abdomen, and creeping a quarter-inch at a time without ever fully relaxing, and letting structures in between roll through the two fingers, and, in case of an ovary, running around its whole periphery, or of a tube, tracing it up to the cornus uteri and down into the retro-uterine pouch, where it generally terminates,—give often most surprising results, and would doubtless, if universally carried out, change hundreds of diagnoses of leucorrhœa, endometritis, and flexions with adhesions to the far more serious ones of pyo- or hæmatosalpinx.

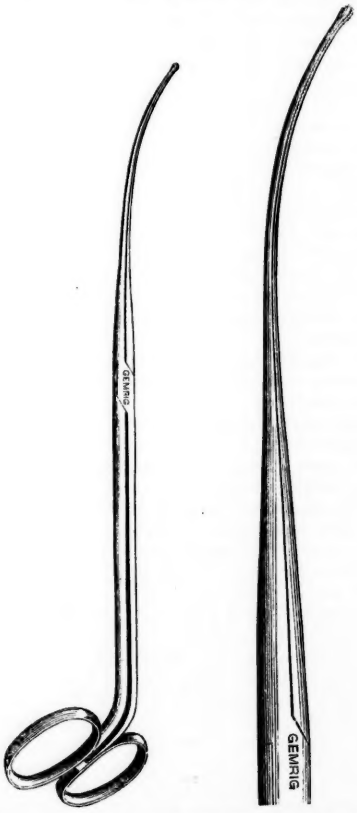
PYOSALPINX.

Dr. JOSEPH PRICE exhibited specimens of pyosalpinx from two patients, and afterwards remarked that Tait and Keith have ended the dark period by showing us how to operate on the abdomen and pelvis without fear and with little risk. The wonderful advance in pelvic and abdominal surgery should be placed to their credit. He believes it is now universally admitted that they have reached the very acme of perfection. One surely must be a convert to Tait's law to contend with the great difficulties in pelvic surgery: "That in every case of disease in the abdomen or pelvis in which the health is destroyed or life threatened, and in which the condition is not evidently due to malignant disease, an exploration of the cavity should be made." Standard works on ovariotomy dwell at great length on the subject of adhesions, as the most important and difficult complication with which the operator has to contend. In short, in pelvic operations the risk and the difficulty will ever lie in the separation of organized inflammatory products. Adhesions, when old, between the pelvic viscera and diseased tubes become degenerate, and hence easily ruptured. In one case only had strong adhesions, deep in the pelvis, stayed his hand. The right tube and ovary adhered strongly to the sac and right side of the uterus, and the whole adherent mass was absolutely inseparable. Again, the rupture of pus-tubes or cysts filled with inflammatory, septic, or malignant elements will be followed by serious symptoms. Operation becomes difficult when the ovaries and tubes, tightly distended with pus and softened through pathological changes, cheesy in consistence, are matted together with the rectum and small intestines.

Dr. CHARLES HERMON THOMAS exhibited a

UTERINE APPLICATOR AND DRESSING-FORCEPS COMBINED.

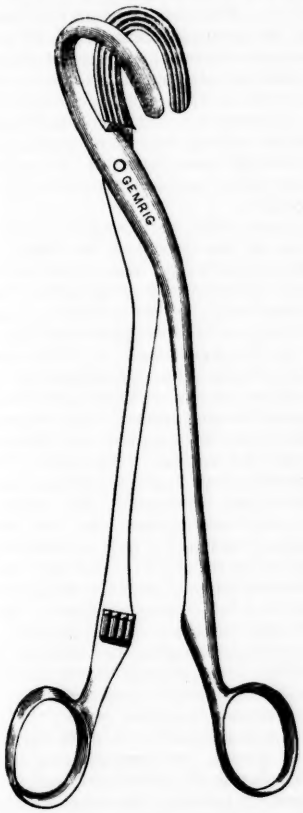
This instrument, which is specially adapted to making applications within the cavities of the neck and body of the uterus, but which is also available for making dressings and applications to the vagina and external surface of the cervix, has borne the test of two years' use. It is in forceps form: the blades are strong and resistant from the handles forward about two-thirds of their length, when they narrow rapidly, so that when taken together they become about equal in size to the ordinary uterine sound. This narrow portion, somewhat suggestive of the long beak of the angular ear-forceps, is about three and a half inches in length, the tips being roughened on their opposed surfaces. It holds securely the smallest pledget of cotton, and, by reason of the springy character of the beak, will permit the locking of the handles when a full-sized pledget or tampon is placed within its grasp. The point is slightly probed as an extra precaution when introduced to the uterine fundus, though a small cotton ball answers all needful purposes as a protective tip. He had usually employed the plain point, on account of its occupying less space at the internal os uteri. The beak is curved to a shape corresponding very closely to that of Ellinger's dilator, which had been found so generally well adapted to entering the uterus. This portion is electro-plated with gold, when so ordered (a proceeding of moderate cost, and to be commended), as a protective against the corrosive action of iodine, iodized phenol, and the like, which so rapidly destroy nickel-plating and corrode polished steel surfaces. The instrument was made under his directions by J. H. Gemrig & Son, of this city.



Some practical points of use may be mentioned. Soiled or medicated cotton is easily removed with the use of one hand only by simply unlocking the handles and wiping the point in a crumpled paper, thus leaving the other hand free for other employment, and avoiding the trouble, the soiling of the fingers, and the whittling often involved when the wire applicator is used. In its use

there is immunity from the rasp-action of the closely-wrapped cotton of the wire applicator, and also a greatly-increased carrying capacity of the cotton for medicated liquids. Moreover, it will be found convenient and desirable to make use of the instrument as a uterine sound incidentally in certain instances. In his own experience it had proved practicable as an applicator, one fully meeting the needs of most cases, while as a uterine dressing-forceps for general use it had been found so satisfactory as to have superseded all other instruments of this class.

Dr. BAER said the instrument presented by



Dr. Thomas was a very ingenious one, and will doubtless serve a good purpose where the cervical canal is patulous. A greater quantity of the medicating agent used can be carried to the diseased surface than when the tightly-wrapped cotton is used.

Dr. J. F. WILSON had nothing to add to what Dr. Thomas had said. He had used one for several months, and agreed with Dr. Thomas as to the ease of application and removal of soiled cotton.

Dr. PARISH said that the forceps was valuable and would be much used. As an applicator it will be very convenient. A few years ago the sound and applicators were too much used, but extremes either way are wrong. Applications to the endometrium are sometimes needed.

Dr. H. A. KELLY said this was a very valuable instrument.

OVARIAN TUMOR.

Dr. PARISH exhibited a specimen of ovarian tumor removed the previous day. The symptoms had been very peculiar, and the form of the abdomen was misleading, there being a deep groove across the hypogastric portion of the tumor. Numerous adhesions gave great fixity. These adhesions embraced the colon, parietes, and bladder, and were old and dense. Its rapid growth had raised a question of malignancy. A great portion of the tumor was solid.

Dr. HARRIS remarked that a microscopic examination of the tumor should be made. There had been great difficulty in diagnosis as to the origin and character of the tumor. A slight fluctuation could be detected in the lower portion under the use of an anæsthetic. There had been no uterine symptoms, and menstruation had been regular. The long Fallopian tube crossed the tumor and made a deep constriction across its middle.

Dr. BAER did not think rapid growth a proof of malignancy. He had seen five or six cases of very rapid development: one in three months contained a bucketful of fluid. In none of these cases has there been any return or other sign of malignancy. The presence of papillomatous growths within the cyst is no proof of malignancy.

Dr. JOSEPH PRICE exhibited a forceps for the complete closure of the trocar-puncture in ovariotomy.

W. H. H. GITHENS,
Secretary.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

A STATED meeting was held January 6, 1886, the President, Dr. J. M. DA COSTA, in the chair.

Dr. George Waring, Jr., of Newport, Rhode Island, read, by invitation, a paper on

THE DISPOSAL OF SEWAGE, AND THE PROTECTION OF STREAMS USED AS SOURCES OF WATER-SUPPLY.

One of the most important questions now claiming attention, in connection with the sanitary condition of houses and towns, relates to the manner of getting rid of the foul constituents of the liquid effluent in such a way as to prevent annoyance from odors, danger from the development of infection, and the contamination of watercourses and harbors. The difficulties presented have al-

ways existed, and the ill effects of ordinary methods have always been known. It is only since attention has been called to the relation of the foul effluent of house and town drainage to the spread of diseases that the difficulty has been generally recognized, and only since the modern growth of the larger towns that its dangers have been fully apprehended.

In a few fortunate cases, such as those of towns discharging their effluent into great rivers like the Mississippi, the remedy is provided by the volume of the stream to which the sewage is added. In London, the Thames has become so foul that the Royal Commission which recently investigated the matter pronounced the system of outflow there established to be "a disgrace to the metropolis and to civilization." In Paris, the discharge of the great collecting sewers into the Seine has produced a condition that is no longer tolerable. Were the houses and streets of Philadelphia drained in accordance with modern ideas of decency and efficiency, the condition of the Delaware would perhaps become little better than that of the Schuylkill. The great addition to the tidal volume of the harbor of New York, due to the inpouring through the East River of the higher tide of Long Island Sound, mitigates, but does not remedy, the foul condition due to the discharge of the city's wastes along its whole border. In short, all considerable communities in this country and in Europe are confronted to-day by a problem which it is absolutely necessary to solve. In one way or another the waste organic matter of our domestic life and of our industries must be withheld from the waters into which our sewers discharge.

I propose to notice, only in passing, what may be called the more artificial means for accomplishing this result; that is, the chemical and mechanical methods of precipitation, decantation, and distillation. There are instances in Great Britain and on the continent of Europe, where the difficulty of securing a sufficient area of land for what we may regard as the more natural treatment is so great that there is no choice but to resort to these more costly and less efficient processes.

It is possible, by an addition of the salts of iron and other salts, of milk of lime, of comminuted clay, etc., to cause the deposition of nearly or quite all of the suspended impurities of sewage. The deposit or sludge thus formed is sometimes treated by filtration, drying, filter-pressing, etc., in such a manner as to become available as manure for use on lands not too far removed.

In connection with the Liernur system of pneumatic removal in Holland, an ingenious plan has been devised by which the solid parts of the slightly-diluted effluent are recovered by evaporation *in vacuo*. In Germany, other more elaborate processes, including the distillation of the purified effluent, have been measurably successful in the production of the salts of ammonia for commercial use, and of a residuum of some manurial value.

It seems hardly worth while, in the short space here at my disposal, to do more than to refer to these processes, which, however important under favoring circumstances, are not suited to conditions prevailing almost universally in this country. There is probably no town in the United States where any treatment of sewage is desirable, where it will not be cheaper and more simple to overcome the difficulty by the aid of surface or sub-surface irrigation, or by more concentrated filtration,—filtration, in greater or less degree, being an essential element of all irrigation. This application to the soil is not only cheaper and more simple, but is also more effective. No chemical or mechanical treatment has thus far been devised which produces an effluent so entirely free from organic impurity and from the lower forms of life as that which is produced by properly-regulated agricultural disposal.

We have been, until recently, quite in the dark as to the processes by which organic wastes are destroyed after application to the ground. We seem now to have some positive knowledge on the subject,—knowledge due largely to the investigations of Dr. Frankland in England, and of Schloesing and Muntz in Paris, these investigations being an application of knowledge derived from the biological investigations of late years.

It may now be accepted as a demonstrated fact, that the various processes of oxidation and nitrification by which organic impurities in the soil are reduced to their mineral elements or to elementary salts are due to, or are largely aided by, the reproduction and growth of bacterial life. This was especially well demonstrated in the Paris experiments by the fact that while sewage filtered through a suitable soil confined in a cylinder two metres high, the liquid being applied with intervening periods for aëration, was deprived of its impurities and allowed to pass out at the bottom of the column as pure water, the process being accompanied by a great increase of bacterial growth, the impregnation of the soil with the fumes of chloroform was sufficient, by arresting bacterial activity, to allow the sewage to be discharged as impure as it was received.* Ample confirmation of the obvious conclusion was found in the fact that after the chloroform had entirely escaped from the pores of the soil the purifying effect was fully restored.

Roughly speaking, or rather practically speaking, the process is this. When sewage is applied to the soil its impurities are filtered out and are attached to, or involved with, the particles of the soil. The water thus purified descends to the lower strata,—to the underdrains or other means of outlet. As the water descends, fresh volumes of air enter and

furnish oxygen which it is the office and the means of life of the *bacterium termo* to combine with the retained impurities. The resultant product is fully-decomposed matter available for the use of plants or for innocuous removal in solution. There is much in the way of detail concerning the processes involved yet to be discovered, and investigation is active in this direction. Enough is now known to constitute the basis of a rational theory applicable to the practical processes we are considering. These processes have long been employed with more or less completeness and with corresponding perfect or imperfect results.

It would be a fair summing up of the whole case to say that we now know, by well-established theory and by ample practice extending over more than twenty years, that we have in soil a universally available agent for the safe, inoffensive, and complete destruction of everything in the way of organic waste that we may deliver to it in a proper manner.

As we look over the field of practice, beginning with the Craigentinney Meadows at Edinburgh, which have been irrigated with sewage for more than a century, and ending with the most complete modern examples, we find the greatest conceivable variety of conditions and a great variety of results. There are more than one hundred sewage farms in England to which are applied the effluent of as many towns, large and small. Some of them have been carefully arranged, and are fed by sewers which deliver the sewage to them in a very early stage of decomposition, and where the great bulk of the storm-water is diverted to other outlets. On these the best results are obtained. In other cases the attempt is made to purify the whole outflow, storm-water and all, with the natural result that floods of storm-water deluge the land at those times when it is already drenched by the heavy downfall and is incapable of absorbing more water. Here the result is far from satisfactory.

In Germany, sewage-irrigation farms connected with the city of Berlin, with Dantzic, and with Breslau, arranged in accordance with modern ideas on the subject, are all instances of notable success.

At Gennevilliers, where about one-fifth of the whole outflow of the sewers of Paris, about one-half of the dry-weather midsummer flow, is distributed over a very large area of thirsty and hitherto almost valueless sand and gravel, the result is excellent.

In our own country we have as yet no instance, save the recent one of Pullman, Illinois, of a general system of sewage irrigation. The result there, according to all reports, is as good as it has been elsewhere.*

(To be continued.)

* Atlantic City, New Jersey, should also be excepted. See article in last issue by Boardman Reed, M.D., on Improved Sewerage and Sewage Utilization at Atlantic City, page 492, *ante*.—*Ed. P. M. T.*

NEW YORK ACADEMY OF MEDICINE.

A STATED meeting was held April 1, 1886, the President, A. JACOBI, M.D., in the chair.

The PRESIDENT announced Dr. Van Derveer, of Albany, as memorialist for Dr. Van der Poel, and Dr. Fordyce Barker as memorialist for Dr. Gaspar Griswold.

IS DISEASE OF THE UTERINE APPENDAGES AS FREQUENT AS IT HAS BEEN REPRESENTED?

Dr. H. C. COE, the author, said that chapters on ovaritis and periovaritis were among the most unsatisfactory in text-books. The current literature of the subject was abundant, but much of it was compilation of not a sufficiently critical character, and based upon ingenious but fanciful views of older writers. The ovarian stroma was full of surprises for the microscopist. Within the organ was ceaseless activity, and the minute structure did not constantly show the same appearance either in different ovaries or in different portions of the same ovary. The Graafian follicles themselves were subject to frequent metamorphosis, while their essential structure was a matter of dispute. Nothing was more common than to hear that an ovary had been removed because it was cystic, yet no one had determined the size to which a follicle might attain without being called cystic. If it was so difficult for the microscopist to say where the normal was departed from and pathological changes began, certainly the surgeon should hesitate to pronounce upon the delicate shades separating the healthy from the diseased state by a hasty glance at the organ held up between the fingers at the operating-table.

Dr. Coe then considered the criteria of the laparotomist for judging the ovary to be in a diseased state. These were hypertrophic, atrophic, or cystic change. The ovary was usually described as almond-shape, but it might be spherical, oblong, fusiform, disk-form, and vary considerably in size, and still be normal. It was considerably larger in a congested state, arising from menstruation, the influence of etherization, and other conditions, and such functional or temporary enlargement might be regarded by the surgeon as due to disease calling for extirpation. A diminution in size might be an indication of senile atrophy, and the organ might be scarred and present a variety of appearances due to physiological changes which the superficial observer was liable to mistake as pathological. Localized fibrinous thickening frequently existed in an ovary which preserved its functional activity and in a patient who presented no ovarian symptoms. But among the excuses offered by ovariotomists for removing the ovary cystic degeneration was the one most frequently heard, and the author had time and again seen ovaries containing three or four cysts not larger than a pea presented as cases

of cystic degeneration of the ovaries without the diagnosis being even questioned. Without venturing to dwell upon such a disputed point, he would simply call attention to the fact that, if all such cystic ovaries were to be regarded with suspicion because the precursors of cystoma, few women could be said to be out of danger. True hypertrophy of the ovary was exceedingly rare, as was also hæmatosalpinx; hydrosalpinx and pyosalpinx were also rare, yet many of the specimens removed by laparotomy in New York were said to be of this nature. A large share of them had passed through his hands, and he had found pyosalpinx in not more than one-fifth of the cases. Thus, as the frequency of disease of the uterine appendages had been exaggerated, it was impossible to avoid the conclusion that those organs had been removed oftener than the circumstances justified. He believed that in the future the symptoms of which many of the patients had complained would be explained more frequently by the presence of localized peritonitis or neuralgia. Not a few women who had had their tubes and ovaries removed in New York have precisely the same pains from which they had suffered before the operation, and the one criticism to be offered upon the work of American laparotomists was that they did not follow their cases long enough after reporting them as cured. It was worthy of being borne in mind that if a localized peritonitis had not been the cause of the pain before the operation, it might be developed by the operation and place the patient in a worse condition than she was in before.

Dr. Coe said it had not been his intention to attack laparotomy in general, but he simply wished to show that the presence of insignificant changes in these organs formed an insufficient excuse for subjecting a woman to abdominal section; and he expressed the belief that the present enthusiasm in favor of Tait's operation would not endure, because it would be found that the number of cures was entirely out of proportion to the number of operations. When it could be demonstrated that the tube was distended with pus, of course it should be removed, as there was danger of rupture and peritonitis.

DISCUSSION.

Dr. W. T. Lusk opened the discussion, and said that while he was not an enemy of Tait's operation, because it had been of definite benefit in many instances, he still thought it was performed sometimes when it should not be, and usually for the reason that surgeons were unable to follow Tait's advice, and return the organs to the abdominal cavity when they found after abdominal section that they were not diseased. He had seen at the operating-table tubes lifted out of the abdominal opening and declared to be diseased, when he was unable to see that they offered anything abnormal. When some years ago he was teaching physiology, he often showed ovaries as simply typical examples of normal ovaries which would now often be regarded as cystic. He had an impression that in the future our ingenuity would enable us often to substitute some form of aspiration of the tubes for Tait's operation, and relieve ourselves of the necessity for opening the abdomen at all. He had seen so much disturbance result from removing the ovaries that he thought we ought to hesitate somewhat before exposing a woman to this new source of evil.

Dr. W. Gill Wylie did not know what was to be done, unless each surgeon attached to himself a pathologist who should examine the appendages at the operating-table before they were removed: if this could not be done he would have to depend, as heretofore, upon a clinical diagnosis and the gross appearance of the organs at the time of operation. He was able now, after preparatory treatment and with the patient under ether, to tell almost always the exact condition of the pelvic organs. He rarely operated now, except for pyosalpinx. He did not believe that a localized peritonitis could exist to any extent without disease of the tubes and ovaries.

Dr. W. M. Polk thought that what was now recognized as salpingitis was what we formerly regarded as cellulitis, and we were able to relieve the large majority of cases by confining the patient to bed and applying poultices to the abdomen, etc. But he thought such cases were simply the result of extension of inflammation from the lining membrane of the uterus from a great variety of causes, and if pus got into the folds of the broad ligament it was through the fimbriated extremity of the tube.

Dr. Mundé had found, on looking over his case-books, that out of three thousand cases of diseases of women, one hundred and seventeen were cases of oöphoritis, salpingitis, and peritonitis combined, while two hundred and twelve were cases of oöphoritis not complicated with salpingitis and peritonitis. But, while he had found disease of the uterine appendages frequently, he probably had operated less frequently than many other gynæcologists. These statistics gave an affirmative answer to the question propounded in the paper, but he would not say that removal of the tubes and ovaries should be done as frequently as was done by some of the followers of Tait. He must say that he had not often found dilatation of the tubes with pus and serum. It was not so difficult to say, in a given case, that there was something abnormal and that one suspected salpingitis, but it was more difficult to make a positive diagnosis, and to determine whether or not to operate. With regard to removal of normal ovaries, he did not approve of it, although he had done it twice. One of the patients committed suicide later, while the other made a permanent recovery. In pyosalpinx the tubes should, of

course, be removed. He agreed with Dr. Wylie and Dr. Polk, that the majority of cases of pelvic cellulitis were cases of pyosalpinx which had worked its way out.

Dr. EMIL NOEGGERATH was glad to hear the views expressed by Dr. Polk, as they were those which he had entertained and expressed many years ago. Parametritis and cellulitis he thought could always be traced to a lesion of the mucous membrane of the uterus. Regarding the frequency of the affections under discussion, he had said, many years ago, that endometritis, or endometritis with parametritis, now recognized as salpingitis, was among the most common affections calling for treatment by the gynæcologist. He believed that a number of those cases operated upon could be relieved by other means.

Dr. COE closed the discussion, and said a diagnosis based upon clinical observation could not be so positive as by an examination of the specimens, and consequently some of the cases in which disease of the appendages had been clinically diagnosticated must be looked upon with doubt. He had the support of other microscopists that but few of the specimens sent for examination showed pyosalpinx or hydrosalpinx.

NEW YORK PATHOLOGICAL SOCIETY.

A STATED meeting was held March 24, 1886, the President, JOHN A. WYETH, M.D., in the chair.

Dr. FREEMAN, of the Committee on Microscopy, reported that the specimen of tumor of the brain presented for a candidate at the last meeting of the Society was a small, round-celled sarcoma.

The following specimens were presented for candidates: By Dr. H. MARION SIMS, a dermoid cyst and carcinoma belonging to the same ovary; Dr. G. F. SHRADY, lungs from an infant dead of acute general tuberculosis; by Dr. T. M. PRUDDEN, intussusception.

INTESTINAL INCARCERATION.

Dr. LOUIS WALDSTEIN presented a portion of the gut removed from the body of an Italian, who died, soon after admission to the German Hospital, with symptoms of perforative peritonitis. At the autopsy he found a part of the jejunum, at the right of the umbilicus, cyanosed, and constricted by a diverticulum having its origin at the middle of the ileum, the other end being attached by adhesive inflammation lower down. The portion of jejunum which had got beneath this band had become strangulated, as in two other cases related by him to this Society during the year.

ELONGATION AND FIXATION OF THE VERMIFORM APPENDIX UPWARD, WITH FATAL PERITONITIS.

Dr. WALDSTEIN also presented the intestine of a child which died, aged 9 years, with symptoms of perforative peritonitis. At the autopsy he found an elongation of the vermiform appendix, with fixation upward from adhesive inflammation; within was a fold of mucous membrane, the seat of chronic inflammation followed by acute inflammation with perforation. The case supported an opinion which he had expressed at a recent meeting of the Society, that this abnormal position of the appendix favored inflammation and perforation.

FIBROID TUMOR OF THE MESENTERY.

Dr. WALDSTEIN presented a third specimen, consisting of a fibroma of the mesentery closely connected with the jejunum, removed from the body of a woman who had at first suffered from pain in the abdomen, radiating to the back and thighs; later, from vomiting, emaciation, etc. A tumor was felt in the median line above the symphysis, unconnected with the uterus, and thought possibly to be, by one gentleman, a floating kidney. It was oblong, hard, and smooth. The patient died with all the signs of perforative peritonitis. At the autopsy the small intestine was found much dilated, cyanosed, filled with gas and fluid; in the pelvis was bloody serum. To the right of the umbilicus was a tumor, smooth, hard, oblong, twelve centimetres long, eleven broad, and ten thick, which when moved carried a loop of the jejunum with it, but careful examination showed that it was enclosed between two folds of the mesentery and thus brought in close relation to the jejunum. It was a fibroid, without muscular tissue, with dilated blood-vessels and extravasations of blood. The glands were not enlarged.

ABNORMAL PLACENTA.

Dr. H. J. BOLDT presented a placenta, the fœtal surface of which was corrugated, much shorter in its diameters than the maternal surface, containing small cysts, and presenting the appearance of fibrous connective tissue. There was no history of syphilis. He wished to have the specimen examined by the Committee on Microscopy.

ACUTE TUBERCULAR MENINGITIS AND GENERAL TUBERCULOSIS.

Dr. BOLDT also presented the lungs of a child which had died with symptoms of tubercular meningitis. Tubercles were also found in the lungs and other organs. The interest in the case related to the very rapid progress to a fatal termination in a patient whose family history was non-tuberculous.

ANEURISM OF THE HEART.

Dr. T. M. PRUDDEN presented the heart of a patient who died on the third day after admission to the hospital, having had aphasia and partial right hemiplegia, and a double murmur, and friction-sound at the apex of the heart. The autopsy simply revealed œdema of the

meninges and brain-substance, and rather marked atheroma of the arteries at the base of the brain, particularly of the left middle cerebral: there were no clots, and no signs of embolism.

The abdominal organs were bound together by old adhesions. There was some fluid in the pleural cavities.

The lesions of interest were in the heart, which was increased in size, and showed a little bulging at the junction of the two ventricles in front. All the cavities were dilated, and the walls of the ventricles were considerably hypertrophied.

There was no very marked valvular lesion. At the lower right front aspect of the left ventricle was a pouch, nine centimetres in length by about four in breadth, at which the wall of the heart was not more than a millimetre in thickness. The coronary arteries at their commencement were markedly narrowed from atheromatous degeneration. The specimen was considered rare.

INFLAMED MOLE—MYXOMA OF THE BREAST—MYOFIBROMA OF THE TENDO ACHILLIS.

The PRESIDENT presented the specimens, which were removed from different patients, the first two leading to some remarks on the importance of early removal of tumors which were liable to become malignant, and of thorough removal of the axillary glands. The tumor of the tendo Achillis had given rise to great pain, which led to the suspicion that it was a neuroma, but microscopical examination showed it to be a myofibroma.

At the executive session resolutions were passed upon the death of Dr. Austin Flint.

NEW BOOKS.

NOUVELLES ARCHIVES D'OBSTÉTRIQUE ET DE GYNÉCOLOGIE. Under the direction of CHARPENTIER, S. DUPLAY, BERNUTZ, GUÉNIOT, PORAK, SERRDEY, POLAILLON, and DOLÉRIS (Editor-in-Chief), with a number of collaborateurs, among whom is LUSK, of New York, a new journal appeared on the 25th of January, edited by FÉLIX ALCAU, and published in Paris. It is a handsomely-printed, single-column, leaded octavo, and, in addition to a number of original articles, it has a supplement containing a Répertoire universel d'Obstétrique et de Gynécologie, which is a valuable summary and abstract in French of articles upon allied subjects in the current medical literature in various languages.

DISORDERS OF MENSTRUATION. A Practical Treatise. By JOHN N. UPSHUR, M.D. New York, G. P. Putnam's Sons, 1886. 12mo, pp. 220.

PRACTICAL CLINICAL LESSONS ON SYPHILIS AND THE GENITO-URINARY DISEASES. By FESSENDEN N. OTIS, M.D. New York, Printed for the Author. 1886. 8vo, pp. 584.

VON ZIEMSSEN'S HAND-BOOK OF GENERAL THERAPEUTICS. Vol. IV. THE TREATMENT OF DISEASE BY CLIMATE. By Dr. HERMANUS WEBER. GENERAL BALNEOTHERAPEUTICS. By Professor OTTO LEICHTENSTERN. New York, William Wood & Co., 1886. Pp. 496.

A REFERENCE HAND-BOOK OF THE MEDICAL SCIENCES. Edited by ALBERT H. BUCK, M.D. Vol. II. New York, William Wood & Co. 4to, half morocco, pp. 814.

NINTH ANNUAL REPORT OF THE BOARD OF HEALTH OF THE STATE OF NEW JERSEY, 1885, AND REPORT OF BUREAU OF VITAL STATISTICS. Trenton, 1885.

NEW REMEDIES AND CLINICAL NOTES.

BOLDO-GLUCINE, OR THE GLYCOCIDE OF BOLDO, AS A NARCOTIC.—In the *Paris Médical*, November 21, 1885, it is observed that much has been written on boldo, but no generally-admitted conclusions have been forthcoming. The tincture of boldo was used, as well as the wine, when subsequently boldine, an alkaloid, was isolated by Verne and Bourguin. In 1884, M. Chapoteaut extracted from this plant another substance, which when submitted to reagents behaved as a glucoside. It was first tested on dogs, and afterwards on patients in M. Magnan's wards: doses of two, four, six, and eight grammes were given in draughts, capsules, or in rectal injections. Boldo is a powerful narcotic, without any attendant disagreeable results. A patient of M. Magnan, at the Sainte-Anne Asylum, who suffered from hallucination and passed sleepless nights in a great state of distress and excitement, produced by imaginary tormentors, slept soundly when she took two grammes of boldo. This was discontinued during a period of ten days, and her old sufferings returned; she implored to have the capsules given to her again, and she then passed tranquil nights. Dr. Juranville, in a short memoir on boldo, describes ten similar cases. This substance is a hypnotic agent, producing sleep similar to natural sleep; there is an absence of anæsthesia; the respiration is normal; less carbonic acid is exhaled than when awake; the brain is also less congested than during waking hours. Administered to insane patients, boldo produces sleep in patients who have been long worried by insomnia.—*London Med. Record.*

PERFORATING ULCER OF THE STOMACH OPENING INTO THE LEFT VENTRICLE—DEATH BY HEMORRHAGE.—Dr. Finny reported at the Pathological Section of the Academy of Medicine of Ireland a remarkable case. A farm-laborer, 19 years of age, had acute rheumatism with pericarditis five years before admission into Sir Patrick Dunn's Hospital. He had made frequent complaints of pain in the cardiac region during the interim, but presented no symptoms of disease of the stomach. There was no nausea or vomiting. One morning, after a restless night, he passed blood from the bowels, and shortly afterwards died in syncope. At the autopsy, ulcer of the stomach of unknown duration was found; acute rheumatic pericarditis and adhesions of the left ventricle to the diaphragm, with obliteration of the sac; and, third, a perforation into the muscle of the heart, due to recent activity of the ulcer. The intestinal tract contained blood, of which two quarts were found in the stomach. It was supposed that the perforation was the result of digestion of the heart-wall by the gastric juice.—*Medical Press and Circular*, March 3.

MISCELLANY.

A MOOT POINT OF EXPERT TESTIMONY.—The Supreme Court of Utah recently held in a murder case that it was competent to ask a physician who made the post-mortem examination his opinion as to the direction from which the blow was delivered. The court seemed to allow the question, not because the physician was an expert, but because of the special opportunities he had for examination. The admissibility of the evidence rests upon three necessary conditions: "First, that the witness detail to the jury, so far as he is able, the facts and circumstances upon which his opinion is based, in order that the jury may have some basis by which to judge of the value of the opinion; second, that the subject-matter to which the testimony relates cannot be reproduced and described to the jury precisely as it appeared to the witness at the time; and, third, that the facts upon which the witness is called upon to express his opinion are such as men in general are capable of comprehending and understanding. When these conditions have been complied with or fulfilled in a given case, the court must then pass upon the question whether the witness had the opportunity and means of inquiry, and was careful and intelligent in his observation and examination." This decision seems contrary to a similar case in an Eastern State, where the court regarded the physician simply as a medical expert, and said that physicians were not experts in giving and receiving blows, and that they could not be expected to know how a body could be most conveniently placed for receiving a deadly blow.

MUTILATION OF CHILDREN FOR STREET-BEGGING.—The Seine Assize Court of Paris has recently had before it a horrible case of cruelty to children. Two Spaniards named Vega and Gonzales were accused of mutilating children in order to use them more effectively in street-begging. Some of the witnesses testified that the fiends strapped the little child to a board in agonizing positions in order to make him appear as a cripple. One witness, a woman, testified that watching her chance she was able to examine the boy's arm, which was in a sling, and found on it a horrible wound like a great cancer. The boy told her that his leg was burned in the same way, and that a leprous girl had been treated in a similar way, and was at last abandoned at one of the stopping-places of the party. The youthful victim was examined as a witness, but was in such fear of his torturers that he hardly dared to tell how they operated on him. He said that he had been burned on the instep of one foot, which left it a mass of putrefaction. His leg was also burned, and he had been strapped to a board with rollers and sent into the streets to beg. The defence was, of course, that the villains were innocent, and that the boy preferred going to the streets to beg to being apprenticed out. The jury did not believe, however, that the boy had used vitriol on himself, and convicted the men, who were both sentenced to two years' penal servitude.

ACCIDENTS AND ACCIDENT INSURANCE COMPANIES.—A Western court has been recently called upon to decide whether the rupture of the tympanum of the ear, occurring when a person was bathing, was an accident or not. The bather had an accident insurance policy, and when the injury occurred brought suit to compel payment. The insurance company claimed that coughing brought on the rupture, or, if not, that it simply "happened," and was not an accident at all such as to make them liable. The bather, on the other hand, said that he was diving, and that the sudden passage through the water caused it to strike the tympanum and rupture it. He believed it to be an accident, and the court did also: so the company got the worst of the suit. It is difficult to see what an accident insurance company exists for except to pay such losses as this.

THE Commencement exercises of the Jefferson Medical College were held April 2, when the degree in medicine was conferred upon two hundred and twenty-three graduates. The address was delivered by Professor Theophilus Parvin. A sad accident occurred at the class-reception in the evening. The entertainment was given at Natatorium Hall, and in the midst of the evening part of the temporary flooring yielded and a number fell to the bottom of the basin, some twenty feet. Two members of the class were seriously injured by having the piano fall upon them, and a number of others were bruised, but no fatal accident occurred.

THE MEDICO-CHIRURGICAL COLLEGE held its Fifth Annual Commencement April 3; the valedictory was delivered by Professor Woodbury. The alumni and class supper was given at the St. George Hotel. There were five graduates in medicine, upon whom Professor Garretson, as President of the Board of Trustees, conferred the degree of M.D.

THE annual meeting of the Medical and Chirurgical Faculty of Maryland will be held on April 27, 28, 29, and 30. Colonel George E. Waring, of Newport, will deliver the annual oration, on "The Removal and Destruction of Organic Wastes."

THE annual meeting of the American Surgical Association will be held in Washington April 28, 29, and 30, and May 1.

THE College of Physicians gave a dinner to the Fellows on the 14th instant at the Hotel Bellevue, when a "loving cup" was presented to the College.

DR. JAMES COLLINS has removed to 704 Franklin Street.

NOTES AND QUERIES.

OBITUARY.

ANDREW NEBINGER, M.D.—Among the prominent practitioners of Philadelphia for the last quarter of a century was Dr. Andrew Nebinger, who owed his success to industry, ability, and energy. A native of the old district of Southwark, at twenty-one years of age he opened, in the southern portion of the city, a drug-store, which subsequently Dr. Nebinger placed in his brother's hands, and graduated in medicine from the University of Pennsylvania in 1850. A practical philanthropist, he gave a large share of his care and attention to the poor. His success attracted such a large practice that he was several times obliged to retire temporarily on account of overwork. He was a manager of the St. Joseph's Orphan Asylum and one of the physicians to the St. Mary's Hospital, and a member of the consulting staff of the Philadelphia Hospital.

Dr. Nebinger retired from active practice some fifteen years ago, and devoted himself to his duties as a member of the Board of Education, and to the management of charitable institutions, in which he always exhibited the greatest interest. He was a member of the College of Physicians, and of the American Medical Association, State and County Medical Societies; in the last two he filled the highest offices. Almost his last appearance in medical circles was on the occasion of his delivery of the Annual Address of the President of the State Medical Society at its meeting at Altoona, and the last time he was out of the house was a few weeks since, when he paid a visit to the St. Mary's Hospital. He was never married. Greatly loved and respected by a large circle of friends and patients, he died at his home, April 12, 1886, in the sixty-seventh year of his age.

PROPRIETARY MEDICINES NOT PROTECTED BY PATENT-LAWS.

DR. F. E. STEWART, in an interesting communication, the length of which would encroach too much upon our space to permit its publication entire, directs attention to some facts that are usually overlooked and liable to be forgotten in regard to so-called patent medicines.

1. Patents are issued in order to advance knowledge and stimulate invention, by giving to inventors exclusive rights to produce patented articles for a term of years, in consideration of the process or discovery being made the property of the public at the end of that period, the manufacture subsequently to be open to free competition. The patent laws were not devised to lock up knowledge, but to make inventions common property.

2. The so-called patent medicines do not come under the provisions of the patent-laws, inasmuch as there is no provision for divulging the secret of their composition at any time, nor is it contemplated that their manufacture shall be a public right after a definite period.

3. Proprietary medicines are protected in the same way that trade-marks are protected, and to the same extent, and no more.

4. The common or scientific names of drugs cannot be registered as a trade-mark; and if they are so registered, the right to the exclusive use of the name cannot be successfully maintained in law.

5. When the name is proper and is the peculiar title of the proprietary preparation, the laws do not prohibit the freest use of the remedy under other names, or prevent the use of the same formula or the manufacture of the same preparation by other parties, provided that the public is in no way deceived as to the source from which the preparation emanates.

OFFICIAL LIST

OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT U.S. ARMY FROM MARCH 28, 1886, *TO APRIL* 10, 1886.

MAJOR ALBERT HARTSUFF, SURGEON.—Granted leave of absence for fifteen days. S. O. 71, Department of the East, April 7, 1886.

MAJOR HENRY MCELDERRY, SURGEON.—Relieved from further duty in connection with New Orleans Exposition, and ordered, on the expiration of his present leave of absence, for duty in Department of the East. S. O. 71, A. G. O., March 26, 1886.

MAJOR HENRY MCELDERRY, SURGEON.—Ordered for duty as post-surgeon, Fort Wayne, Michigan. S. O. 69, Department of the East, April 2, 1886.

ASSISTANT-SURGEON LEONARD Y. LORING.—Granted leave of absence for one month, provided that during his absence he furnishes the necessary medical attendance at San Diego Barracks, California. S. O. 19, Department of California, March 24, 1886.

ASSISTANT-SURGEON JOHN VAN R. HOFF.—Granted one month's leave of absence. S. O. 29, Department of Missouri, March 29, 1886.

CAPTAIN JAMES C. MERRILL, ASSISTANT-SURGEON.—Granted leave of absence for three months. S. O. 81, A. G. O., April 7, 1886.

CAPTAIN VICTOR BIART, ASSISTANT-SURGEON.—Sick-leave of absence still further extended one year on account of sickness. S. O. 79, A. G. O., April 5, 1886.

ASSISTANT-SURGEON J. M. BANISTER.—Granted leave of absence for one month, to commence on or about April 2, 1886. S. O. 63, Department of the East, March 26, 1886.

ASSISTANT-SURGEON AARON H. APPEL.—Granted leave of absence for one month. S. O. 66, Department of the East, March 30, 1886.

CAPTAIN H. P. BIRMINGHAM, ASSISTANT-SURGEON (Camp Grant, New York City).—Temporarily assigned to duty at Fort Columbus, New York Harbor. S. O. 72, Department of the East, April 8, 1886.

CAPTAIN JOHN V. LAUDERDALE, ASSISTANT-SURGEON.—From Department of Dakota to Department of Texas.

CAPTAIN GEORGE W. ADAIR, ASSISTANT-SURGEON.—From Department of Dakota to Department of the East.

CAPTAIN JAMES A. FINLEY, ASSISTANT-SURGEON.—From Department of Texas to Department of Dakota.

CAPTAIN H. S. KILBOURNE, ASSISTANT-SURGEON.—From Department of Dakota to Department of the Columbia.

CAPTAIN E. F. GARDNER, ASSISTANT-SURGEON.—From Department of the Columbia to Department of the East.

CAPTAIN WILLIAM W. GRAY, ASSISTANT-SURGEON.—From Department of the East to Department of Dakota.

CAPTAIN J. M. BANISTER, ASSISTANT-SURGEON.—Upon expiration of his present leave of absence, to Department of the Columbia.

FIRST-LIEUTENANT E. C. CARTER, ASSISTANT-SURGEON.—From Department of Arizona to Columbus Barracks, Ohio.

FIRST-LIEUTENANT R. W. JOHNSON, ASSISTANT-SURGEON.—From Department of Dakota to Department of the East.

FIRST-LIEUTENANT GEORGE F. WILSON, ASSISTANT-SURGEON.—From Department of the Columbia to Department of Dakota.
S. O. 79, A. G. O., April 5, 1886.

ASSISTANT-SURGEON RICHARD W. JOHNSON.—Relieved from duty at Fort Buford, Dakota Territory, and ordered for temporary duty at Fort Snelling, Minnesota. S. O. 28, Department of Dakota, March 29, 1886.

ASSISTANT-SURGEON R. L. ROBERTSON.—On expiration of his present leave of absence, will be relieved from duty in Department of Texas, and will report in person to commanding general, Department of Dakota, for assignment to duty. S. O. 78, Department of Dakota, April 3, 1886.

LIST OF CHANGES IN THE MEDICAL CORPS OF THE U.S. NAVY FROM MARCH 28, 1886, *TO APRIL* 10, 1886.

ASSISTANT-SURGEON L. W. ATLEE.—Ordered to duty on U. S. Receiving-Ship "Vermont."

PASSED ASSISTANT-SURGEON N. H. DRAKE.—Detached from duty at Naval Hospital, Philadelphia, Pennsylvania, and ordered to duty at Naval Hospital, Brooklyn, New York.

PASSED ASSISTANT-SURGEON H. B. FITTS.—Detached from duty at Naval Hospital, Brooklyn, New York, and ordered to duty at Naval Hospital, Philadelphia, Pennsylvania.

PASSED ASSISTANT-SURGEON FRANK ANDERSON.—Detached from Naval Laboratory, New York, and granted six months' leave, from May 1, 1886, with the privilege of going abroad.